

professional
portrait
lightings

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GREENBERG : PUBLISHER

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Professional Photography for Profit
Money Making Ideas for Portrait Studios
Who's Who in American Portrait Photography
Advertisements for Portrait Studios
(4 volumes)
I Am Photography

CO-AUTHOR:

Who's Who in Professional Portraiture in America
Advertisements for Portrait Studios
(3 volumes)

COMPILER:

Directory of the Professional Photographic Industry (5 editions)
Classified Membership Directory of the P.A. of A. (10 editions)
Convention Report of the P.A. of A. (7 editions)

CONTRIBUTOR:

The Case History of a Convention
Annual Report on Conditions in the Photographic Industry

IN 1943 WHEN The Photographers' Association of America decided voluntarily to forego annual conventions for the duration of the war, I felt something should be substituted for the most essential features of those conventions—the demonstrations of lighting and posing by leaders of the profession. Photographers everywhere were enlisting or being drafted, leaving their studios to the care of their wives or employees. Some way had to be found to give these people, forced by circumstances into unexpected responsibilities, the help that conventions could no longer provide. This was the more important at that time because they were being called upon for photographic service far more serious than that of the days of peace. Many of the young men and women they were photographing might never return and their portraits would in many cases be the only remembrance left to the bereaved families.

I conceived the idea of a "Lighting Demonstration" issue of my magazine *The Professional Photographer*. I wrote fifteen noted portrait photographers, whose ability not only as craftsmen but as platform demonstrators was unquestioned, and asked their co-operation. From each I requested one portrait not before published, a lighting diagram, technical data, and a discussion of the lighting demonstrated as well as some general remarks on posing and camera room methods. To any busy professional—and during the war they were working literally day and night—this was a considerable assignment. Only because I promised to do the writing if they would give me the facts, and prepare uniform diagrams from whatever they might supply, no matter how rough in form, was it possible to secure the basic material I had to have. Very few photographers, even those who are at their best on a platform before a large audience, are facile writers. My task became therefore not merely the editing but the rewriting of these demonstrations in such a manner as to preserve the ideas, the thoughts, and the personality of each contributor, except for the very few mentioned.

Suffice it to say that the December 1943 issue of the magazine aroused such interest and enthusiasm that I immediately commenced work on a second, to include fifteen noted women photographers. That was published in December 1944, and a third followed a year later. By that time the war was over and conventions had been resumed, but ever since there has been a growing demand for the publication of all three in book form. I had already foreseen that, but I believed something far more comprehensive was required. Hundreds upon hundreds of veterans and others were newly entering the profession, while thousands more were attending schools of photography. No matter how good their schooling in the basic essentials of lighting and posing, it would be limited to the methods of a comparatively small number of instructors. So I began all over again. I rewrote all but a few of the original forty-five demonstrations to assure a general uniformity of style and to eliminate much concerning sales methods and studio operation which would have been out of place in this book and, through the courtesy of some sixty more equally famed portraitists, expanded the total to one hundred. The result lies before you.

Charles Abel

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One more feature about this book is unusual: it is distinctly American. With very few exceptions all previous books on lighting have been by British authors or have been translations from other languages. Naturally, except for the theory of lighting which is universally accepted, such books refer to the use of equipment not obtainable in America and sometimes obsolete. Translated works in most cases are based on the use of amateur equipment, while those from Britain employ terminology which is frequently quite dissimilar in meaning from the same words used over here.

These pages emphasize the individualistic character of portrait photography itself. No two of these hundred photographers follow identical techniques, yet all are leaders in the profession. It is not the equipment they employ that accounts for the results they obtain, but the manner in which they use it. What one accomplishes with six lights, another duplicates with one. The secret, then, is threefold: first, an understanding of the theory of lighting; second, the ability to secure the desired type of lighting regardless of equipment; third, a capacity to arouse the subject to the desired height of interest at the appropriate moment. That secret is disclosed here in a manner that all can understand.

In closing this introduction to a book that I confidently feel will be a genuine contribution to the profession of photography, may I take this occasion gratefully to acknowledge my debt to the one hundred portraitists whose names appear on the following pages? Without their assistance this book would not have been possible; for their generous service, rendered not merely because they were friends who were willing to aid me in writing a book, but because they want to help their colleagues of the camera, the profession as a whole owes them a heartfelt vote of thanks.

To My Wife

in recognition of still another year of uncomplaining tolerance and forbearance while I pound my typewriter from early morning until late at night.

THE CONTRIBUTORS

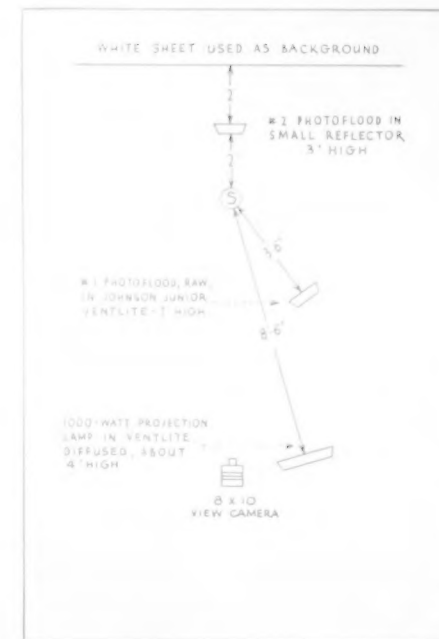
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8

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Lighting diagram for Bradford Bachrach's portrait of a bride.

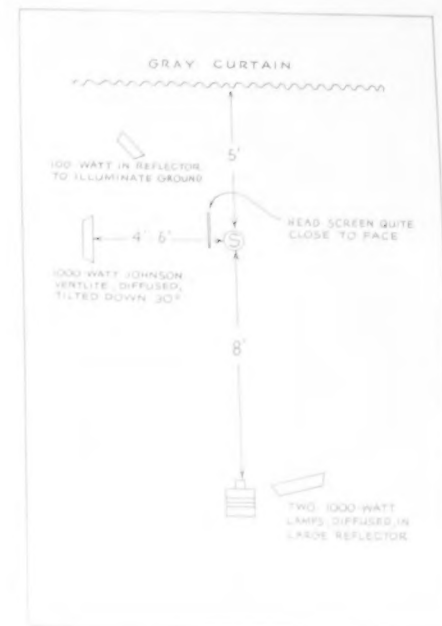
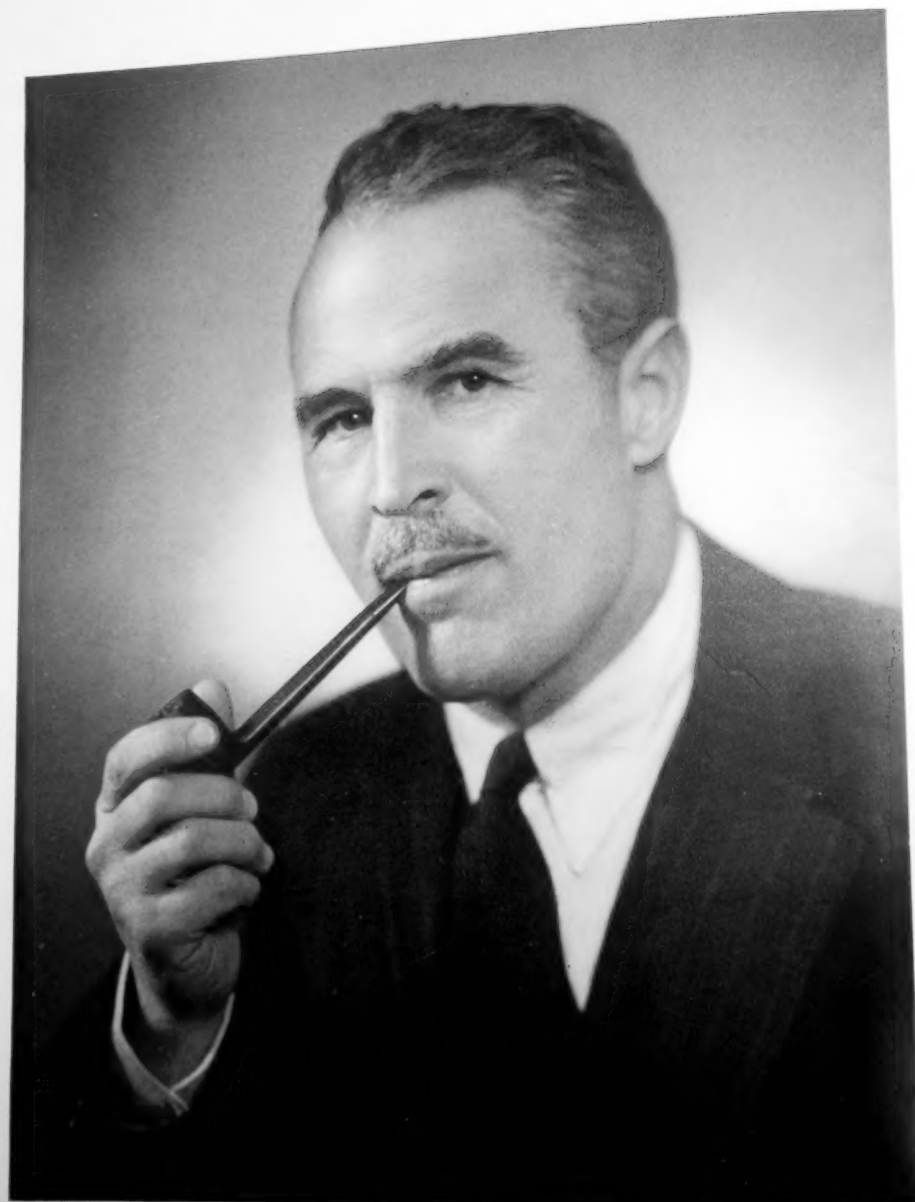
HERE is a bridal portrait to which perhaps most specialists in this field will object on the basis that it is incomplete, yet experience has proved to me that not all bridal photographs should be made showing the entire gown or even three quarters of it. Styles change in all things, and many modern brides seem to have arrived at the conclusion that a bridal picture should be a real portrait of the bride and not merely a photograph of the gown. To me, many such photographs are mere dressmakers' records. The bride plays second fiddle to the costume and, especially in the case of full lengths, her face is often so small as to be hardly recognizable. The photographer who will include at least one pose of this type among his proofs, even though the bride and her party insist on the more customary full drape and train effect, will find it a worthwhile experiment. And from his standpoint, what pictorial possibilities there are in a young girl, dressed in white and wreathed in tulle!

I have always felt, and again this has been confirmed by the reactions of my sitters, that bridal pictures deserve the delicacy of high key treatment. At the same time very careful consideration must be given to proper separation between gown and veil and between veil and background. This separation, combined with a high key lighting, is easier to achieve with a close-up figure than with either a full-length or three-quarter. In any event some sort of backlight, directed either at the veil or the background, is necessary to secure the essential separation. In this example, the background was lighted and I believe this is the preferable arrangement when using the type of facial lighting illustrated.

This portrait was made with a raw #1 photoflood as the main source light. This lamp was in a Johnson Ventlite Junior with the adjustable angle arm, and the base of the stand was about four feet from the subject. The reflector was carefully adjusted so that the angle at which the light strikes the face would cast just a slight shadow from the upper eyelids and yet be high enough so that the face would not be broadened. The light thus was actually closer than four

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FABIAN BACHRACH
New York City



Lighting diagram for Fabian Bachrach's portrait of a man.

ALTHOUGH the popular demand in portraiture is still concentrated on the head-and-shoulder or "bust" portrait (I prefer the term "close-up") I regard it as a serious omission if the hands are not included. My specialty is the photography of men, and to me the hands play an integral part in the delineation of character. This portrait presents my method of compromising what the sitter wants with what I consider essential in a complete character portrayal.

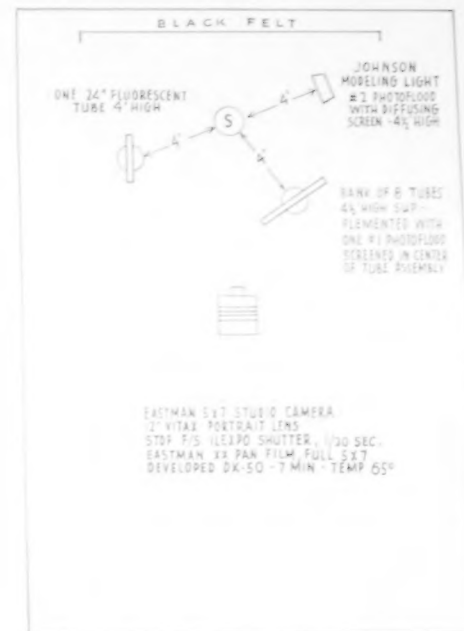
The eye-fooling quality of the lighting in this photograph I find very useful for irregularly-shaped faces because it places half the face in a high key and half in a semi-shadow. In addition, the back-lighting of the hand breaks it up into an interesting shape and gives it a more natural form and appearance than can be achieved with the customary front lighting.

The subject was seated on an armchair, leaning slightly forward. His left arm carried his weight on one arm of the chair, thus steadying him and making it easy to hold the pipe in the other hand without strain. The chair was placed five feet from a gray background which was illuminated by a 110-watt lamp in a small reflector, adjusted to strike the ground directly behind the subject's head. The camera was eight feet away. The main source light was a 1,000-watt Johnson Ventlite diffused with tracing-cloth, four and a half feet away at one side. This was raised to six feet and tilted to bring the light down at a thirty degree angle. To give roundness to the lighting on this side, a head screen was placed quite close to the face.

The shadow side of the face was then illuminated with a large reflector containing two 1,000-watt lamps diffused by deflectors and tracing-cloth. This was raised to a height of eight and a half feet and pointed straight at the face. Note especially the detail in the collar, its separation from the shirt front and the fact that although it is necessarily the highest light in the picture it is not the bald white (assuming that the engraver can retain the tone) which so often ruins portraits of men.

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ROBERT L. BALL, M. PHOTOG.
Corvallis, Oregon



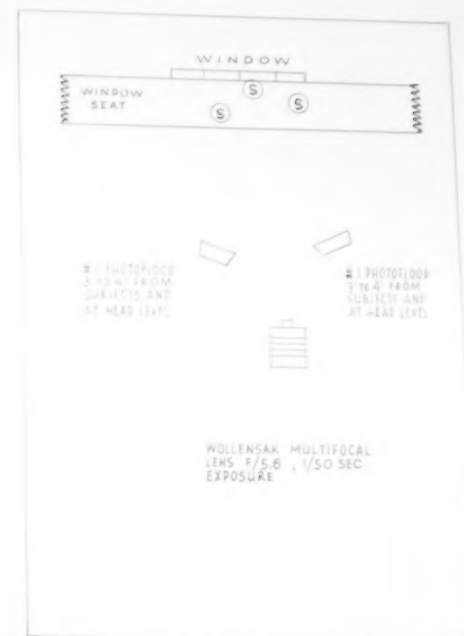
Lighting diagram for Mr. Ball's portrait of a soldier.

DURING World War II military portraits were the order of the day with all professional photographers. Since it seems that for many years to come we shall be compelled to maintain more men and women in uniform than ever before in our history, portraits of this type will be a recurring problem that involves more than merely the method of lighting.

Our purpose in photographing such a young man out of uniform would be to portray him as a light-hearted, buoyant college lad and we would use a lighter background and a higher, more brilliant key of light in harmony with his youthful energy. Here, however, he is in the service of his country. His temperament has changed. He has a new job, in which he has developed a serious, determined interest. To convey that feeling we employ a heavier background and a quiet but forceful lighting.

Though I have made hundreds of portraits similar to this, none has ever satisfied me more. This type of photograph does not require as much imagination as those with more complicated lightings and characterizations. It can therefore more readily be made by the majority of photographers, especially as it requires only the simplest of equipment. For that reason it seems to be the most helpful contribution I can offer.

My main source light is a bit different from the ordinary. It consists of a bank of eight fluorescent tubes with a #1 photoflood, screened, in the center of the tube assembly. To balance this, I prefer only one 24" tube in a reflector to another smaller bank of tubes. For this portrait I also made use of a #2 photoflood at the right rear, for roundness and emphasis. The camera was a 5x7 Eastman Studio with a 12" Vitax Portrait lens in an Ilexpo shutter. The exposure was one-twentieth second at F 5 on 5x7 Eastman XX panchromatic film which was developed in DK-50 for seven minutes at 65°.



Lighting diagram for Mr. Bill's group of three.

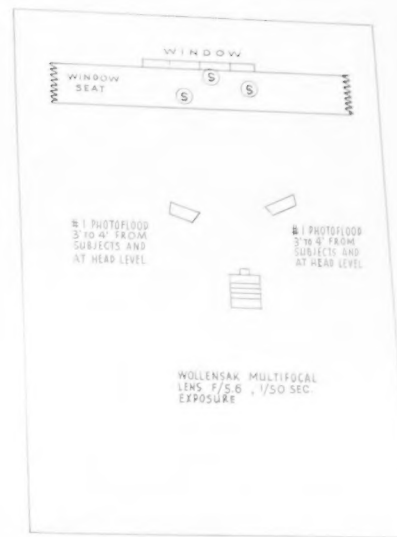
THE photographer who makes a practice of home portraiture—and I, for one, make only home portraits because my studio is my own residence on those occasions when I am not working in the homes of my subjects—is fortunate when he comes across a window seat like this whereon to place his sitters. It is wide enough to afford ample room for such a group, for big brother to sit behind the baby and still allow sister to sit on the edge, making possible a pyramidal composition that is both well-balanced and interesting.

This photograph was made early in the morning when the sun, pouring in the window, provided me with a nice backlighting effect for my young sitters. To balance this strong daylight I used two undiffused #1 photoflood lamps in reflectors, one on each side of the camera but close enough to fill in the shadows sufficiently. When working with panchromatic film and such a mixture of daylight and photoflood, I have found that it is necessary to use enough of the artificial light to make the lighting appear very flat on the ground glass. The difference in the sensitivity of the film to the two kinds of illumination is sufficient to make the daylight come up the stronger, giving modeling and good pick-up lights.

The exposure was one-fiftieth second with a Wollensak Beach Multifocal lens stopped to F 5.6. This print, as one can see on close inspection of the reproduction, is a combination of two negatives. The baby's head and hands are from one, and the balance of the picture from another. In the original negative the baby had her hands in her mouth and I made the change because it afforded a much more attractive grouping. Also I think it is better from a compositional standpoint because nothing of interest interrupts the imaginary line from big brother's eyes toward those of the baby, a line automatically followed by the eyes of everyone who looks at the photograph.

To me this is one of the most satisfactory groups of children I have ever made. I think other photographers who specialize in child work will recognize it as one of those fortunate groups that happen only once in a great while.

FRED R. BILL, M. PHOTOG.
Cleveland Heights, Ohio



Lighting diagram for Mr. Bill's group of three.

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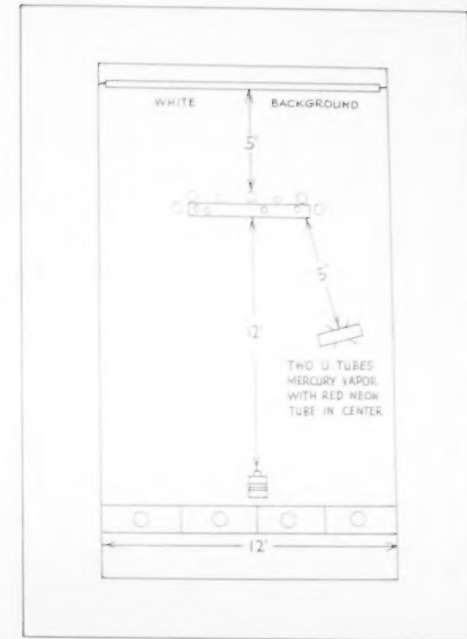
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Formal group



Lighting diagram for Mr. Bill's two groups.

FOR my demonstration I have selected two groups, one of eleven persons and one of ten, because after all there still are large families and although many photographers think of a large group as a serious problem it has often been my experience that these are easier to handle than the one or two pampered children of adoring parents. When photographing groups, especially if youngsters are included, it is essential to work rapidly if the subjects are not to become bored by the procedure and difficult to control. For this reason I try to position my lighting equipment so the minimum movement of lights will be required once I have the group arranged. This implies, and it is important, that the photographer has a general idea of his composition in mind before attempting to place the individuals. I usually commence by seating the parents (or grandparents) in the center and then building the group around them. Constant conversation is necessary to maintain their interest. Best results will be obtained if an assistant places the camera and gets it in focus while this is being done so that, composition and lighting completed, exposures can be made without delay. In this manner an ample number of negatives may be made in a few minutes.

So much for the more formal photograph. In addition to this I always try to hold the family's interest long enough for a regrouping in some out-of-the-ordinary arrangement. The group of ten is an example. Here the interest is centered on the father who, for the purpose of the photograph, is showing the family a toy supposedly just purchased for the youngest child. Personally I much prefer this type of group because it indicates so much better the personalities and reactions of the individuals.

Both groups are made with identical equipment, placement of lights, and exposure. Large backgrounds are needed and I have two in my camera room, each twelve feet wide, from wall to wall on spring rollers, one before the other. One is white and the other black, and the white one was selected for these pictures. My camera room, in a remodeled residence, is not large. Behind the camera I have four Johnson Ventlite parabolic ceiling reflectors, extending the full width of the room. Each is covered with fine white tissue and contains a 750-watt lamp, the four

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Lighting diagram for Mr. Blaker's portrait of "Two Bitsy"

BECAUSE I feel sure that most of the contributors to this book will select photographs representative of their normal studio work I thought a print illustrative of the "salon" type of portrait might be a welcome addition. More than this, I am firmly convinced that the photographer who does not break away now and again from the standard procedures of his studio runs the chance of having his pictures become monotonous. For that reason, and because I have found competition with other photographers, both professional and amateur, to be a definite stimulus toward better craftsmanship, I have become a confirmed salon enthusiast.

My subject is an old man who has hauled waste paper from our studio for a number of years. We call him "Two Bitsy" because he uses that expression constantly in quoting his prices. He was a difficult sitter, staring constantly into the camera except while he was talking to me. I finally secured the expression I wanted by making the exposure just as he finished a burst of conversation in very broken English.

This is a simple one-source lighting, nothing but a #4 photoflood in a Johnson Ventlite balanced with a Beattie reflector and with a head screen interposed to reduce the light on the ear. I made no attempt to cast light under the brim of his cap or to soften the deep wrinkles beside his nose because I was deliberately planning a rugged effect. Nothing else would have been suitable.

This was taken with an 8x10 Eastman portrait camera and a 19" Voigtlander Heliar lens in an Ilexpo shutter. The exposure was a half second at F 8 on 5x7 Eastman Portrait panchromatic film, which was visually tank-developed in DK-60a at 65° for about six minutes. The negative was projected to 11x14 on Opal G. The print was developed in D-52 for one and a half minutes and then gold-toned.

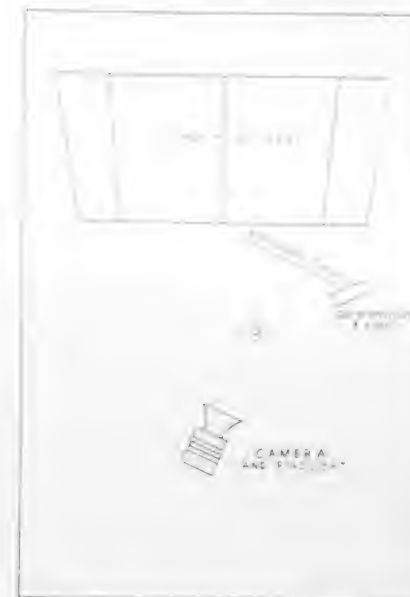
Perhaps a word or two about my studio methods may be helpful. Because I believe that

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CARL W. BLAKESLEE, M. PHOTOG.
Tampa, Florida



The "ring light" described by Mr. Blakeslee



Lighting diagram for Mr. Blakeslee's portrait "Sonny"

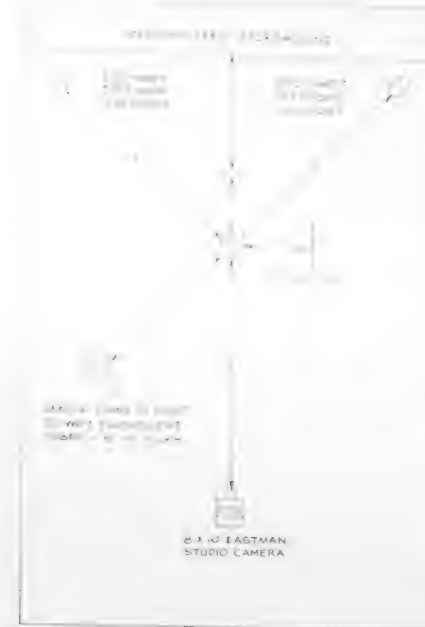
PHOTOGRAPHERS using a fixed or stationary light source are inclined to get into a set method of working. A large north skylight such as we have used in our studio for many years is certainly stationary and perhaps we are in a rut through having depended on it for so long a time. Still, I like it and try to take advantage of the many opportunities a skylight offers, especially in enabling one to work "against the light."

The majority of our portraits of women and children are made in this manner using the skylight for backlighting the hair and then balancing the resulting halo with artificial light. There is something about daylight which seems to "work into" the hair and not just illuminate it. Daylight also seems to go around the subject instead of breaking off in a sharp line. On these rather vague premises my partner and I have built up a system of backlighting which pleases us. It seems to fit our moods and methods of securing rather glorified pictures of women and youngsters.

Among other things we found that our balancing light must be at or very near the lens if annoying shadows are to be avoided. We therefore built a shadowless "ring light" for our camera. This light, illustrated in the smaller photograph, is really nothing more than a very deep lens shade with a ring of eleven 100-watt lamps grouped around it as closely as possible. The soft glow produced by this ring causes very little strain on the subject's eyes, less in fact than any single point light having anything near the combined power of the eleven lamps in the ring.

Sonny's portrait was made by this method principally because I wanted to preserve the delicate tonal quality of his face, with its grand array of freckles, and at the same time pour daylight into his hair until it was full and overflowing. As an unorthodox lighting this is subject to criticism. I hold no brief for this portrait save to say, sincerely, that I believe I could have made no better picture of this boy with standard lighting systems. Nor half so good.

A standard Studio camera was used, equipped with the ring light shown in the illustration.



Lighting diagram for Mr. Blew's portrait of a young lady

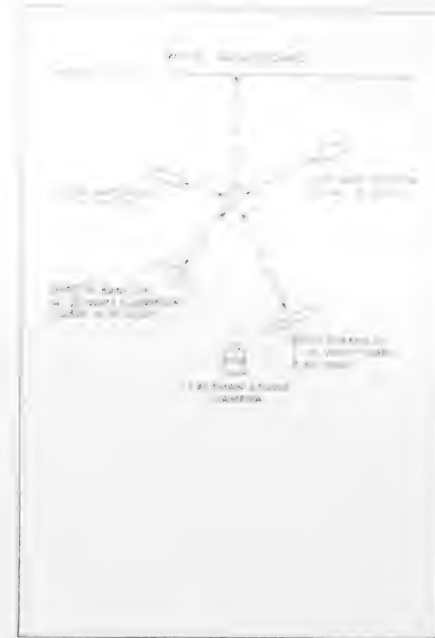
MAKING fine portraits is a real pleasure. Trying to portray character is no easy task, but it is well worth-while and those of us who engage in it should bear in mind that the photographs we make today must be good enough to retain the approval of the generations that will follow.

From the moment I am introduced to a subject in my camera room until the time comes to say "Good-by," I try to create confidence in my ability to secure a portrait that will please. I am careful to avoid any appearance of haste, though I go about my work with the air of one who knows what he is doing. I have everything in readiness and have taken care so to familiarize myself with the possibilities of my equipment that handling it becomes almost automatic. To avoid later corrections or objections on the part of my sitter when the proofs are shown, I watch the little but important details of dress and hair. It is so much simpler to get these things the way they should be—in the negative.

Because it is so much easier for my subjects, I use fluorescent lights. I believe in taking advantage of every possible means of placing the subject at ease, in order to obtain natural expressions. Any sitter has enough to contend with when in a studio without adding the annoyance of glaring lights. Rather than blinding the eyes, fluorescent light is actually kind to them and adds to their appearance. The coolness of fluorescent light also adds to the sitter's comfort. With all this, it is a broad light that gives fine modeling when properly used.

I believe in instantaneous exposures and particularly in making the exposure without the knowledge of the subject, thus catching the most natural expressions. I try to hit on some subject of mutual interest and carry on a continuous conversation while I am working. Usually I explain very frankly that I get my best results when the subject is at ease and not concerned about how the pictures will turn out. I suggest that the subject let me do the worrying about that, which usually draws a smile and clears the atmosphere. Also I often try to create an expectancy by remarking, just after I have made what I think will be an especially good negative: "I think that is the one you will choose."

RAYMOND BOWERS
Pueblo, Colorado



Lighting diagram for Mr. Bowers' portrait of a young priest

THE accompanying portrait was selected for use in this book because it presented a very definite problem, that of combining in one photograph two outstanding characteristics, either of which might well have been lost without a rather delicate treatment of the lighting.

When this young priest came into my studio I was immediately impressed with his unusual friendliness, affability and sense of humor. These traits were to be expected since I knew him to be a very active worker among the young people of the community, keenly interested in their sports and activities. I also knew him to be outstanding in his chosen profession from a strictly religious point of view. And so the problem: how to merge these two seemingly conflicting attributes in one portrait.

An alert smile might well have captured the first, but would certainly have lost the second. A very serious aspect would have conveyed the latter, but at the expense of the first. Hence I decided to aim for an expression just departing from the serious, while retaining the keen liveliness in the eyes. This required a lighting that would bring out all of his facial character—character unusual in so young a countenance.

My diagram shows how the lights were handled and can easily be duplicated, but be sure to heed these words of caution. The 100-watt spot, placed high and slightly from the rear to point up the highlights on the face, must be used with extreme care. Both its strength and direction are important. If too strong it will overbalance the lighting, probably throwing one eye into heavy shadow; if too weak it will flatten out the lighting and might better be omitted entirely. It should be so directed that the light will strike only those planes which carry the desired highlights of the facial modeling. When so handled it must completely miss such undesirable but frequently encountered features as a prominent chin, over-high cheek-bones, a bulging forehead and the like. So I repeat, use the spotlight with care.

This portrait was made with my Eastman Studio camera and 15" Series II Cooke lens in an

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JAMES H. BRAKEBILL, M. PHOTOG.
Knoxville, Tennessee



Lighting diagram for Mr. Brakebill - portrait of a man

THE use of light in photography, and consequently the arrangement or placement of the various pieces of lighting apparatus the photographer uses to secure his result, has become less simple as more spectacular forms of portraiture have become acceptable. It is often surprising how one touch of light introduced into a photograph can lift what would otherwise be a mediocre interpretation of a face to where it becomes a characterization of a person. Our use of light, therefore, must be as unlimited as the types of persons we are called upon to portray, and the photographer who fails to keep abreast of new developments in lighting may well be overlooking the very thing needed to raise his pictures from the commonplace.

The subject I have chosen for this book is a coal operator, a man possessed of the qualities required in his field today: quiet purpose, steadfastness, and courage. These we must convey in our portrait if it is to be successful, and because his pipe is so much a part of him that without it he would not feel relaxed, we included it as a matter of course.

As this or any other subject appears before our camera, we have two means at hand to attain our objective: our knowledge of lighting and our knowledge of psychology. We must be relaxed and free from any fixed concentration so that the sitter may reveal his own character without being diverted by our anxiety about properly registering him on our negative. In other words, our knowledge of lighting and our ability to handle apparatus must be second nature and this relaxed mental attitude is important. The subject, having been seated in a directed general illumination, must positively be reassured with our own confidence in what we are doing as we proceed to manipulate our lights to complete the balance of our lighting set-up.

I have often found it helpful and desirable to give the reasons for placing the lights as I do, explaining some of the fundamentals of portrait lighting which were recognized and practised by the famous Old Masters (though I would recommend this only when dealing with fairly well-educated persons). The aim, of course, is to interest and relax the sitter once you have

FRIEDA M. BRENNER, M. PHOTOG.
Wauwatosa, Wisconsin



Lighting diagram for Miss Brenner's portrait of the captain

It is one of my favorite hobbies in portraiture to photograph men while they are smoking. If a man is the right type he usually looks and feels much at ease when fortified with a cigarette, cigar, or his favorite pipe. This portrait of a young captain who had returned from the European theatre of war with the Presidential Citation and thirty-one missions over Germany to his credit was made at the request of his bride. I had already made pictures of the wedding party but, having seen some of what she called my "smoking men," she wanted her husband photographed with his cigarette.

For such poses I try to work quickly, get my set-up and lighting just as I want it, and then have the subject light up. At the right moment, when the effect of the rising smoke is to my liking, I secure a quick, spontaneous smile by interjecting some fitting but unexpected remark. Usually the first such exposure is the most satisfactory.

When photographing persons in uniform, the first requisite, as with all portraits, is a good likeness. In addition we must also be concerned with securing discernible insignia and other markings of rank. They are important to the subject and must be clear, though not necessarily pin-sharp. No master sergeant, for example, will thank a photographer for demoting him to sergeant or even private by thoughtlessly cutting off his arm insignia. Too, ribbons, service stripes, and wound stripes, earned as they have often been at great risk of life or at least pain and suffering, are equally important to the person who wears them.

I am convinced that people want portraits which portray not only likeness but character. In every set of negatives I make, whether of men, women, or children, I include some serious poses. This young captain is no exception. His wife has serious pictures of him in addition to this one.

The lighting diagram speaks for itself. The lens was an 18" F 3.8-F 4.5 Graf Variable, stopped to F/8, and I used my Ansco Studio camera. The exposure was instantaneous with a Packard shutter on 6¹/₂ x 8¹/₂ Defender panchromatic film. The negative was developed for nine

(continued on page 257)



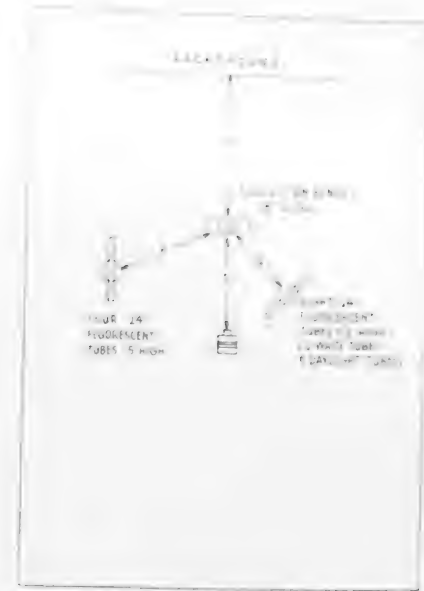
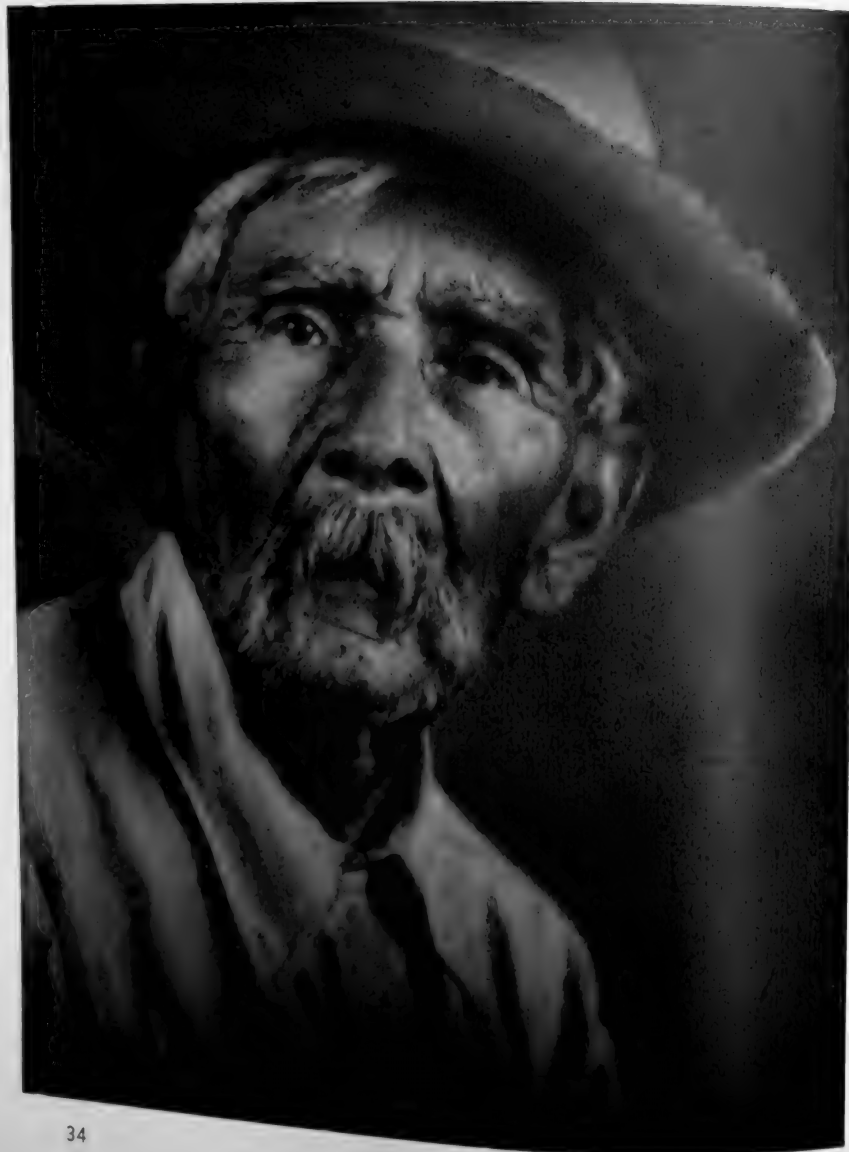
Lighting diagram for Mr. Brown's portrait of a clergyman.

It is a source of regret to me that so many photographers today tend to concentrate their efforts on large heads or head-and-shoulders, so-called "bust" portraits. Granting that even this is not easy if a good likeness and fine characterization are to be obtained, the general effect is to reduce portraiture to one level, and a mediocre one at that. The hands, the carriage of the head on the shoulders, and the customary position of the body are every bit as necessary in the production of a true rendition of the subject as the face and expression. It is my advice to anyone desirous of improving his photographic craftsmanship that he make of every sitter at least one three-quarter or full-length pose.

I have selected this clergyman for my demonstration because he has such an interesting characterful face and because such a subject presents an immediate challenge to me to produce a portrait which will be in keeping with his type. It should be needless to say that the first two requisites are a well-balanced lighting and a properly timed exposure. For the former I am still in favor of the good old method: two lights, one main source and another for modeling, with tempered and proper use of a spotlight when it seems desirable, as in this case.

For this portrait I placed my sitter four feet six inches from a medium gray background, with a bank of four 48" fluorescent tubes behind the camera for my general illumination. The modeling light was a second bank of eight 24" tubes. Then, with a Photogenic Sun-Spot, I threw raw light from a #2 photoflood lamp across the face, bringing out the texture of the skin and emphasizing the strength of the features. The effect on the ground was not produced with a back-light. Instead this was worked up, as well as some of the highlights on the face, on the back of the negative after flowing it with ground-glass varnish. Very little retouching was needed.

This was made with an 8x10 Cooke anastigmat on an 8x10 Studio camera. The lens was stopped to F 4.5 and the exposure was three seconds on an 8x10 Cramer Hi-Speed plate which was developed in D-52 for five minutes at 68. The reproduction is from an 11x14 Indiatone Royal White projection, developed four and a half minutes in D-50 at 65.



Lighting diagram for Mr. Buehman's portrait of a sorrowing old man

My greatest pleasure in photography is in the portrayal of character, the proper rendition of those beautiful lines wrought by age which do not mar the countenance or bring sadness to the beholder. There is a marked difference between wrinkles and similar disfiguring blemishes and those facial markings which result not merely from time but from thought and experience. Too many photographers have the mistaken impression that to portray character it is necessary to light with a certain degree of harshness and eliminate retouching. Character lines are natural and beautiful in themselves and need no emphasis. Retouching is still required to take care of objectionable or disturbing peculiarities. To me the eyes tell the story in any portrait. Lighting, composition, and technique must be correct, of course, but what we want to portray must be expressed in the eyes.

The youngest son of this old man had been reported missing for six months before I made the photograph. He couldn't and wouldn't give up hope of the boy's return and it was his sorrowful expression straight from the heart, his wistful hopefulness, which I think has been successfully captured.

In my camera room I have two Beattie lights, each containing eight 24" fluorescent tubes, each tube of course in its individual reflector. Each light is controlled with two switches so that I can use four tubes or eight in each light, as I prefer. Thus one, with eight tubes lit, becomes my main source light while the other, with only four tubes in operation, serves to illuminate the shadow side. In this way I can light either side of a face without having to move my lights back and forth across the camera room. They need only be moved backward and forward with relation to the subject while I regulate the volume of light with the switches until I obtain a satisfactory balance. Each light contains two white and six daylight tubes. I use no screen or reflectors.

My camera is an 8x10 Century on a Century Studio stand, and for this portrait I used a Series II 9 1/2" Wollensak Velostigmat at F 4.5. The exposure was full pressure on the bulb of a Packard Silent shutter with immediate release, possibly a half second. Ansco 5x7 Super pan-



Lighting diagram for Mr. Burnell's novelty portrait

MY offering might be called a "novelty" portrait. The idea is one I have found extremely popular with fliers and because it can be adapted for many other purposes I thought that even though unorthodox, it would be well suited for this book. The emblem of a fraternity or sorority, the crest of a school or seal of a class, all will promptly suggest themselves as appropriate for various types of subjects. In this case the airplane was copied from a magazine, the background having been blocked out. The image is printed-in by contact, slightly diffused to give atmosphere and distance. Several sizes of negatives may be kept on hand for different print sizes. The placement of the figure in the space must be planned with the inclusion of the smaller image in mind, although I think this would be an entirely adequate composition were the plane omitted.

My light is a White Flame arc, undiffused in order to simulate sunshine in this portrait. I used no reflector because I wanted the shadow on the face to be rather heavy to carry out the sunlit effect and also give force to the portrait. The dark shadow transfers the interest from the plane to the personality of the flier and also subdues the ear, thus concentrating attention on his expression and character. The impression I wanted to convey in the ground, and which I think I secured, is that of a slightly filtered sky. If too light, the values on the face would have been lost; if too dark, the result would have been that of an overcast sky, out of harmony with the warm, strong appearance I desired.

Building equipment is a hobby of mine and I have enclosed my arc light in a box-like frame with sliding tracing-cloth panels on the front, two sides and back. The top is open. The arc in its box moves sideways on a ceiling track and, as the photograph of my camera room shows, the entire track also moves from one end of the room to the other. The arc can thus be placed at any spot in the room and, so placed, can then be raised, lowered, or even revolved. The light, shining in all directions, not only illuminates the ceiling but suffuses the entire room

continued on page 37



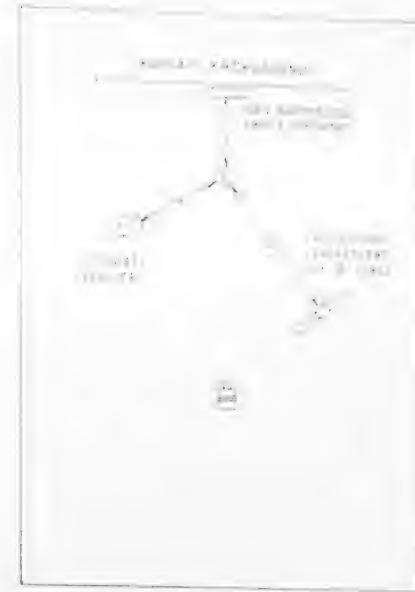
—which is fourteen feet by twenty feet with a twelve foot ceiling—with a lovely soft glow. Though my walls reflect enough light for most purposes, but when I desire stronger reflection in backgrounds I use one each of my Burnell-made mirrors, also photos on the walls. These are easily up and down, staying solidly in my position on the strong support rods which are long enough to slantably adjust and move easily on amply sized casters. With this and light and two reflections I can produce almost any lighting for which most studios would require three separate light sources. When I wish I can cut off light in my subject and by sliding down the top panel from top and reflect the resulting raw light from the side with my mirrors, producing any quantity of "moon".

For backgrounds I have opaque curtains on rollers. Behind them may be both open or closed down in the camera room, producing a rough wall, or even which I produce outdoor effect with raw light from the air. At the opposite end of the room is a large black wall which comes in handy for groups and full-length portraits. The pictures on the wall, which can be and are frequently changed, are there purposely. From the comments of my subjects I can learn what poses please them best while I am arranging my equipment.

The background for this portrait was a six foot by eight foot cream gray roller shade. The front panel of the arc box was dropped, although those on the sides remained in place. This gave me raw light directed on the subject while that reaching the ground was softened by passing through the tracing-cloth. The arc was moved toward the subject until the tone of the background provided the balance required.

My studio stand, also homemade, carries an 8x10 view camera to which I have affixed a large lens hood. The lens was a 10 1/2" Bausch & Lomb Tessar stopped to F 8, the camera being placed low to give elevation to the sitter. Exposure was one twenty-fifth second (all my exposures are instantaneous) on Ansco Triple S orthochromatic film developed in Ansco's 48-M metaborate tank formula. The reproduction is from an 11x14 projection, the original negative being 2 1/4 x 3 1/4, one of four made on a single 5x7 film in the days of film rationing. When I first commenced making such small negatives I was disturbed about retouching them but soon found that by the use of a magnifier and a very sharp pencil I had no trouble.

B. J. BURNS, M. PHOTOG.
Evanston, Illinois



Lighting diagram for Mr. Burns' portrait of a young lady

INASMUCH as my studio slogan for many years has been "All the children smile for Bernie," it may seem a little odd that I have chosen for inclusion in this book a portrait of a young lady. It is true that most of my subjects are children, but my purpose here is to discuss lighting and that is enough in itself for the student to follow without the additional distraction of controlling a young, and almost certainly restless, child. So I offer this as an example of what I like to consider modern posing and lighting in portraiture.

Lighting itself is not all that makes the good portrait; to me expression is even more essential. You must be on the alert to catch it, but with present-day panchromatic films there is no excuse for failure.

As for children, the more difficult the subject the more time you must spend in getting acquainted before attempting the serious work of making the portrait. Even with the well-mannered child, you must be on the watch all the time for those characteristic smiles or gestures which flit past in the fraction of a second but which, to the parents, represent their impression of their child.

My lighting is simplicity itself. My main light is fluorescent, which I have used since its infancy. I like it because of its coolness and still more because it eliminates the glare one otherwise gets so frequently in the eyes. The lens used was an 8x10 Wollensak Verito stopped to F 6 and the exposure was one twenty-fifth second on Eastman Super SS panchromatic film.

W. E. CHEYNE, M. PHOTOG.
Hampton, Virginia



Lighting diagram for Mr. Cheyne's portrait of a seated bride.

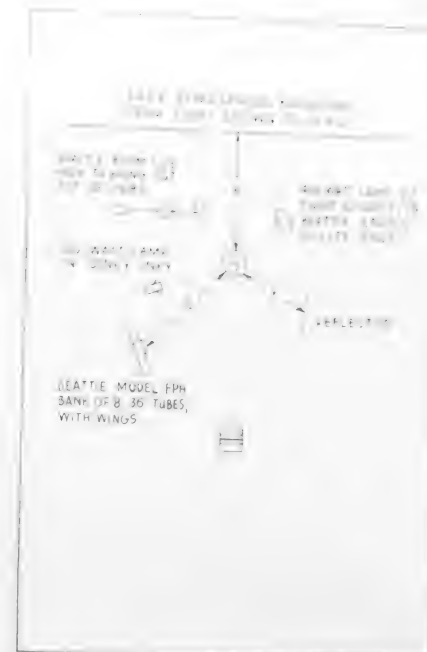
HERE are two examples of what I consider good, average photography, portraiture of the type that any competent photographic craftsman should be able to produce on what might be called a day-in day-out basis. The picture of the bride is not recent, but I selected it because I think more photographers should attempt poses like this instead of the stereotyped straight-as-a-stick wedding photograph. I was fortunate in having a lighting diagram filed with the negative because this picture was used as an illustration during a lecture I gave before a camera club. The portrait of the man was made with a demonstration in mind. Although it is a conventional head-and-shoulder portrait, it varies from the ordinary in being deliberately centered—or rather optically centered—in the picture space. This is a violation of normal compositional rules and I wanted to show that, if one has a proper understanding of composition, he may forget the rules if a subject warrants such treatment. Both portraits were made with an 8x10 Ansco Studio camera with 5x7 reducing back.

When photographing a bride, I use ample light to insure against showing undesirably dark shadow areas in the folds of the gown and to secure the sparkle and shimmer in the material. In a photograph like this, which necessitates a horizontal composition, the train and veil must be drawn out to one side. Some accessory is therefore needed to provide balance and mass on that side. Hence the flowers on the stand at the left gave me an opportunity to break up an otherwise monotonous background; the shadow produced by the spotlight was added for that sole purpose.

I am a great believer in a good boom type of spotlight which can be swung high behind the head of my subject to give separation between the head and the background. Only with a long boom can this be done satisfactorily without a terrific waste of time in trying to keep the stand out of the picture. Although I am very partial to fluorescent light, for many purposes it is too soft and often does not throw sufficiently strong shadows to produce adequate drawing. To correct this lack, I always place some type of incandescent light in front of my fluorescent on

W. E. CHEYNE, M. PHOTOG.

Hampton, Virginia



Lighting diagram for Mr. Cheyne's portrait of a man

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the highlight side. In this case the added light was a #2 photoflood.

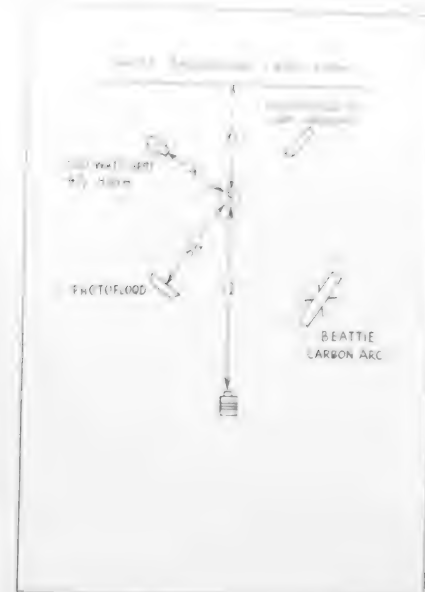
For this portrait I used a 12" F 4.5 Bausch & Lomb Tessar, stopped to F 8. The exposure was a fast bulb, approximately one-fifth second, on 8x10 Defender XF panchromatic film, developed for seven minutes in DK-50 at 67°. The print is on Defender Velour Black DL-2.

You will notice the considerably altered lighting arrangement for the portrait of the man. Except for the boom spot on the hair I have returned to a simple one-source lighting, balanced with a reflector on the shadow side. Nevertheless, for the reasons already explained, my one source is actually two lights, my fluorescent bank plus an incandescent light. Here my supplementary light is a 150-watt lamp in a little Dinky-Inky spot, diffused with one thin sheet of spun glass. I find this little light one of the finest tools one can have in the camera room. Most professional spotlights are too "hot" and burn out the flesh values, but this light really adds pep to the highlights without overdoing it and produces just the right amount of shadow to give fine drawing. I always use a snoot on it because that gives me accurate control of the light placement, so much so that a head screen is usually unnecessary.

When a man has white hair, which too frequently is burned out so that he appears almost bald, I feel every effort should be used not only to show the hair but to show its whiteness. I have my own little trick for getting this desirable result and it calls again for the long boom light I mentioned before on which, incidentally, I almost always use a snoot so the light will not spill over where it is not wanted. For a subject like this I keep adding sheets of spun glass in the snoot until I have cut the light down to a soft, weak illumination. This brings out the hair nicely without accentuating the slight baldness that usually accompanies very silky white hair.

This was made with a 14"-16" F 3.8 Graf Variable lens stopped to F 4.5 and slightly diffused. Like the other, this exposure was a fast bulb of about one-fifth second, but the negative was on 5x7 Defender XF orthochromatic film; processing and print the same as before.

MRS. JACK CONES
San Antonio, Texas



Lighting diagram for Mrs. Cones' group of mother and child

If a word of advice is in order I would like to urge every budding portrait photographer to become "quick on the trigger." The sooner you can finish with your sitter when you have him before your camera, the better your results will be. I do not imply that any subject should be rushed, because it is important to allow plenty of time both before and after the actual sitting but I do work rapidly once my subject is in the camera room. Use tact and courtesy in handling the sitter to obtain a feeling of confidence, for the sitter who has been impressed in advance with the thought that the photographs are going to be good will almost invariably be pleased with the proofs. Those who have been rushed or neglected will be looking for defects.

Another error to which I think photographers are prone is their habit of holding religiously to accepted sizes. Too many of them seem to feel that every inch of the negative is sacred and must be reproduced in the resulting print. Consider the trimming of the accompanying illustration, which is almost square. It has been my experience that if portraits are finished to off-standard dimensions, such as 8x8 or 11x12, they attract more attention. Aside from this, of course, good composition is very largely a matter of trimming and it is the exceptional craftsman who can compose his picture perfectly on the ground glass. True, the laws of composition tell us that a square shape is not as attractive esthetically as an oblong, but the reader will agree, I am sure, that to add a couple of inches to the bottom or either side of my accompanying illustration would be harmful rather than beneficial.

I selected it for that reason and also because it is considerably more difficult to secure a good portrait of a mother and very young baby than of a lone individual. In this case I used a white ground because the mother had very dark hair. Had she been a blonde I would have thrown another spotlight on her hair or placed her before a dark background in order to get separation and contrast. I might even have done both. My main light is a Beattie carbon arc. A photoflood in a reflector served as my modeling light and a 500-watt spot at the left rear picked up the highlights. Another photoflood on a low stand illuminated the background. The lens was a 16" Cooke Portrait stopped to F 5.6 and the exposure was instantaneous on a

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B. A. CULBERSON, M. PHOTOG.
Asheville, North Carolina



Lighting diagram for Mr. Culberson's portrait of a baby

THE keen interest and animation displayed by this baby are my reasons for selecting this photograph for my demonstration. The portrait shows what can be brought out through the exercise of proper technique combined with patience.

Patience, to my way of thinking, is the most important element in the satisfactory portraiture of babies. Because today they are subject to a great variety of soon-dreaded visits to doctors for inoculations, vaccinations, and other treatments which involve the use or at least the close proximity of fearsome pieces of apparatus, babies quickly learn to view strangers and unusual surroundings with suspicion. So first correct any such impression by spending enough time to make a friend and playmate of your little subject. The child will quickly get the idea that the whole affair is to be a new and wonderful game, and its feelings will be reflected in the photograph. In my studio the mother remains in the camera room with the baby until I have gained its confidence when my assistant tactfully suggests that the youngster be left alone with me. I find I get far better results when the family co-operate in this manner. The only other two essentials are a fast emulsion and ample light.

My two main lights are Photogenic Hi-Power fluorescent banks, which I supplement with a Photogenic Sun-Spot; all as indicated in the diagram. For work with children I have several low platforms, few more than one foot in height. A greater distance from the floor tends to frighten small babies.

This portrait was taken with a Series B 16" Wollensak Beach Multi-Focal lens on an Eastman Studio camera. The lens was stopped to F 11 and the exposure was one twenty-fifth second with a Packard shutter on 5x7 Eastman Ortho X film. The negative was developed in DK-60a for seven minutes at 68.



Lighting diagram for Mr. Culberson's portrait of a baby.

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Diagram for Mr. Degn's portrait of a young lady.

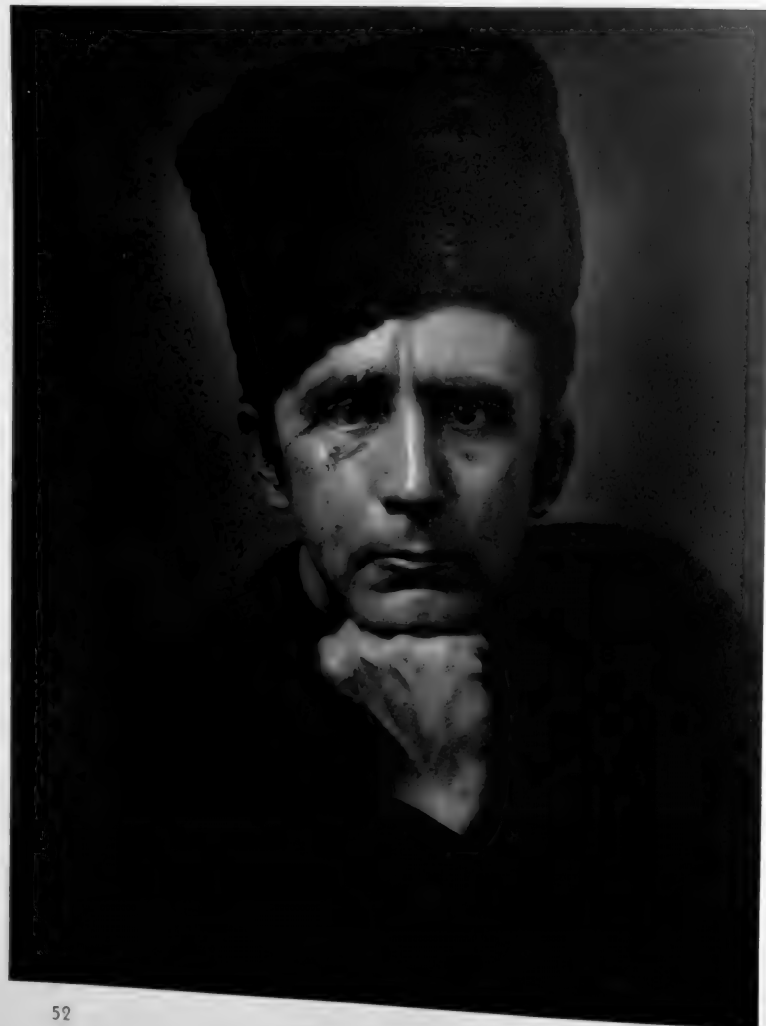
I HAVE selected this portrait because it exemplifies a factor often neglected by photographers: that in the retention of the likeness of a sitter it is still frequently necessary to "play down" facial characteristics which the subject recognizes as unpleasing. I do not refer to the minor blemishes which may readily be removed or altered by retouching but to those aspects of the features themselves which can, and should, be altered photographically by the proper use of light or the posing of the subject.

This young lady has been photographed many times in different studios but she was never before satisfied with the result because her face always looked too narrow and her nose too long. Viewed as a live person neither would be overly noticeable but every photographer has heard the statement: "I never take a good photograph," and all of us know there are many people who are not normally photogenic.

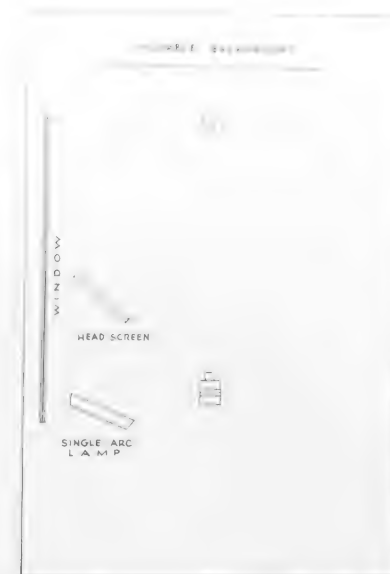
To correct this and produce a satisfactory portrait, my first decision was to emphasize the broader side of her face and also to keep the camera low. This enabled me to shoot up at her and alter the perspective. I seated her on an Eastman posing chair, with her right foot on a ten inch high posing stool and then had her lean over, placing her right elbow on her right knee. This broadened the base of the picture and improved its composition.

For my main source light I selected a 1,000-watt blue lamp in a Johnson Ventlite, three feet from the sitter and at a forty-five degree angle. The fill-in light was a Photogenic Hi-Power bank of five 15-watt daylight fluorescent tubes, four feet away on the other side and at a similar angle. To give life to the hair I added a Photogenic spotlight at the right rear, with a 400-watt blue lamp. This was taken with an F 4 14 $\frac{1}{2}$ " Wollensak Verito lens stopped to F 5.6. The exposure was one twenty-fifth second on 5x7 Eastman Super XX panchromatic film developed in DK-60a, diluted one to one, for twelve minutes at 65°. The print is on Opal G developed in D-52, also diluted one to one, for two minutes at 70°.

HORTENSE MARABLE DE TAMBLE, M. PHOTOG.
Gainesville, Florida



"The Cossack"



Lighting diagram for Mrs. de Tamble's portrait "The Cossack"

THE character study I have selected for my demonstration is one of a series of photographs of my favorite model—my husband. While I had been making character studies for a number of years, this series was quite different, each photograph being a combination of costume, make-up, acting, and photographic technique. Aside from the pleasure of being able to do just exactly what one wants as compared with the inhibitions one suffers when photographing the average sitter, such experiments help to keep a photographer alert and also provide him with suitable prints for exhibit purposes.

Character studies offer a real challenge. Just as a portrait painter seeks to express his thoughts and ideas with his brush, so the photographer finds self-expression with his camera and creates that which he sees in his imagination. Pictures such as "The Cossack," the title of this, require mental agility on the part of both photographer and model, for this type of work at its best is truly a co-operative effort.

Here there was the desire to create a picture which would definitely convey authenticity in its characterization. It was desirable to avoid "flashiness" yet at the same time to produce an impression of truth: that here, in this picture, was a true Cossack. This presented special problems of character rendition because it was necessary first to decide what would appear authentic and then to transform the model into character.

The costume was simple. A black cassock such as those worn by priests served for the cloak. The turban or shako was nothing more than a piece of sealskin, fashioned to fit the head and flattened somewhat at the top to broaden it. For make-up a foundation of brown greasepaint was rubbed thoroughly into the skin to simulate a weathered texture. As a distinctive feature the scar that runs across the forehead, eyelid, and down onto the cheek was then added, to resemble a saber cut. To avoid any necessity of retouching the negative this, too, was accomplished by make-up.

The model ready, the setting was next considered. As it was decided to emphasize the

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Lighting diagram for Mr. De Woskin's bromoil transfer of a portrait of himself.

I HAVE always favored the impressionist over the realistic school in portraiture. Obviously, any portrait must be a likeness of the subject or it is not a true portrait. That accomplished and the likeness accomplished, the photographer may then depart from the mechanical processes of his craft and proceed to add the artistic touch in the completion of his picture.

For that reason 75 per cent of my work is done with a soft focus lens. I prefer a certain amount of diffusion in all my portraits because in my interpretations I seek to obtain the effect of mass rather than detail in line. A finished picture can be produced in masses without detail, but not in detail without masses. If the masses are photographed correctly the detail, though not present, will be insinuated. The spectator will mentally supply it. There lies the difference between the realist and the impressionist: one brings out all the detail and leaves nothing to the imagination, the other photographs what he considers important to his composition and leaves the detail to the spectator. I carry this even farther by finishing many of my portraits in bromoil or gum-bichromate, or printing them through screens.

The exposure was one-tenth second at F 5.5 on an 11x14 Cramer Hi-Speed film.

The portrait of the painter is a bromoil transfer. For this I used only my single mercury vapor tube and a reflector because I wished to maintain a subdued tone. Using my 11x14 Studio camera and a 21" Struss Pictorial lens I composed this entirely on the ground-glass. The right angle caused by the edge of the painter's canvas and his brush is deliberate. The expression and pose I wanted required that he commit the cardinal compositional sin of looking out of the picture. Though the eye of the spectator follows the subject's glance, it is immediately brought back into the composition by the long line of the brush and the emphasis on the hand. No portrait of a painter would be an accurate characterization if the hand were not shown. This brought it into the picture in a logical and appropriate manner. Finally the plaster cast on the bench in the rear was necessary to bring the whole into balance.

under each page

PHILIP DE WOSKIN

Saint Louis, Missouri



Lighting diagram for Mr. De Woskin's screen effect portrait of a lady

veloped in Elon-Pyro at 68°. On my Struss lens I use supplementary lenses—21", 26" and 31" focus—to get good perspective on 11x14 negatives. In fact I use long-focus lenses for all my work, even on small negatives.

The profile of the lady was taken with a 5x7 Ansco camera fitted with an F. 4 Wellensak Verito. The exposure was one-tenth second at F. 8 with a Packard pin-type shutter on Eastman SS Portrait orthochromatic film, tank-developed in Elon-Pyro at 68°. The reproduction is from a projection to 8x10 through an engraved screen on Opal G.



Lighting diagram for Mr. De Woskin's screen effect portrait of a lady

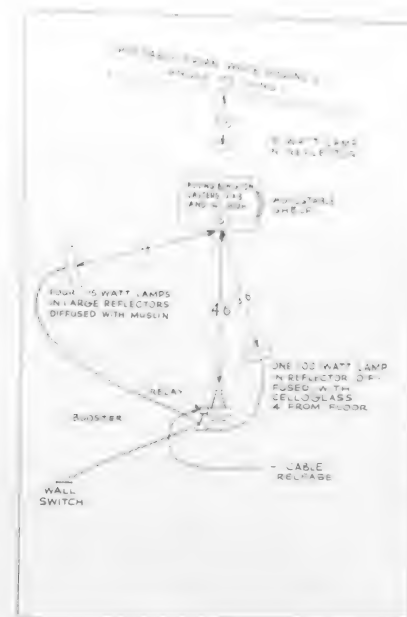
Portrait of a lady, 1911

veloped in Elon-Pyro at 68°. On my Struss lens I use supplementary lenses—21", 28", and 31" focus—to get good perspective on 11x14 negatives. In fact I use long-focus lenses for all my work, even on small negatives.

The profile of the lady was taken with a 5x7 Ansco camera fitted with an F. 4 Wollensak Verito. The exposure was one-tenth second at F. 8 with a Packard pin-type shutter on Eastman SS Portrait orthochromatic film, tank-developed in Elon-Pyro at 68°. The reproduction is from a projection to 8x10 through an engraved screen on Opal G.

PEGGY DONNELL

East Lansing, Michigan



Lighting diagram for Mrs. Donnell's portrait of a freckled boy

MAKING successful portraits of children requires a rather special technique. The photographer must be in complete control of the situation at all times, which necessitates equipment that can be operated easily and simply. He must also have a considerable knowledge of child psychology. Two photographic axioms apply particularly to child photography: use as few lights as possible to get your desired modeling; it isn't the equipment that counts as much as the person behind the camera. I can see the point of requiring diagrams with these illustrations because the diagram does indicate to the less-trained worker in portraiture the initial placement of the lights. Still, it must be remembered that we are "painting" our pictures with light, light which varies as the square of the distance, light which travels only in a straight line, light which is reflected from a face or a feature at the same angle at which it strikes. Neither my illustration nor any other can be precisely duplicated without the identical sitter in the identical position, while the movement of any one light a few inches forward or backward or the variation of its angle toward the subject as little as one degree will produce a quite different result. Given any diagram and any sitter, a satisfactory approximation of a selected lighting must be the result of study and experiment.

First of all, I limit myself to two main lights, adding a 75-watt lamp in a reflector attached to an ordinary goose-neck fixture on the floor behind the sitter and directed at the background when I want a light ground effect. This also simplifies the making of vignettes. The larger light which may be lowered and tilted to any angle, is a simple large reflector with a muslin diffuser and contains four 75-watt lamps. When photographing groups I use this lamp in a horizontal position directly in front of the camera. Sometimes, in a family group, one child with dark clothing may be sitting lower than the others. In that case I tilt the lamp in his direction and thus balance the lighting. Thus, for groups this large lamp becomes my main source and my other light, a 100-watt lamp in a reflector with a Celloglass diffuser, is taken back of the camera to one

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PEGGY DONNELL

East Lansing, Michigan



Mrs. Donnell's camera stand and power pack. The camera stand, as well as the flood light, were built to her own design.

side or the other and adjust the light to suit the subject. The opposite arrangement is used for closeups such as this portrait. The small lamp in front of the camera becomes my main source with its concentrated illumination and the other provides my balance. I find that no matter in which direction my subject turns his head I still get good modeling in this way. Of course neither of these light placements is rigidly followed but I know what general effect I can expect from each and am thus left free to devote my attention to my subject.

My camera is a 3 $\frac{1}{2}$ x 4 $\frac{1}{2}$ Auto Graflex with a 7 $\frac{1}{2}$ " Bausch & Lomb Tessar lens. I think nothing is better than the reflex-type camera for photographing children. With a cut film magazine holding twelve films and the rapid changing of film this makes possible, the photographer can devote his entire attention to his subject. Refocusing is almost automatic and an occasional quick glance into the hood substitutes for the constant ducking back and forth under a focusing cloth. Use of the Graflex requires a low seat for my sitters but this has its own advantage inasmuch as, being only fourteen inches from the floor, they seldom if ever have any fear of falling off and this added feeling of security is usually reflected in their expressions. My seat, or rather bench, is large enough for small groups or an ample supply of toys and other objects interesting to a child. It is on casters so I can easily turn sitter and all to another position without disturbing my subject. At one end, shown in the diagram, is a little adjustable shelf on which a child can rest hands or elbows. The movable background is cream-white in color and I place it at an angle to the camera to avoid reflecting light into the lens.

Lights and camera are hooked up electrically as the diagram indicates and all are operated with a ten foot cable release. This gives me complete freedom of movement around my subject. At the base of the camera stand, illustrated in the smaller photograph, is a power pack which boosts an ordinary Mazda lamp to the intensity of a photoflood. At the moment of exposure the lights which, up to that time, have been burning on regular voltage, leap to a greater intensity so that, in effect, a 75-watt lamp becomes a #1 photoflood. Thus I have the necessary volume of light for the exposure without straining the sitter's eyes during the focusing and posing. The camera stand, which is counter-balanced, raises or lowers very easily.

This portrait illustrates my point that when making pictures of children the photographer must be in control of the situation. When this child and his brother were brought into the studio, the first thing the mother said was: "I don't know whether or not you can get any good pictures. We are leaving in the morning for Florida and everything is at sixes and sevens. The older boy doesn't take a good picture. He isn't as photogenic as his brother. We want his picture before we go away but we can't have a resitting." All of which, said in the presence of the two boys was hardly calculated to simplify matters.

I photographed the older boy first in order to get him away from his parents as soon as possible. I sent them out of the camera room with the younger boy who was, as his mother said a good-looking child. Left with my subject, I didn't hurry. I visited with him. He was an intelligent though self-conscious youngster. I never talk down to children of any age and find that if they are treated as individuals they will respond. I wanted this boy to be relaxed, and to have an interested, alert expression. You see the result. The freckles were not retouched as he would have looked unnatural without them. The parents were very much pleased and liked the portrait even better than the one I made of the younger boy. The exposure was one-fifteenth second at F 4.5 on Eastman Ortho X film, tank-developed in DK-60a for eight minutes at 70°. The print is on Opal G, developed in D-52 (half and half) for two minutes at 68°, then toned in Ansco Flemish toner.



Lighting diagram for Mr. Dryer's two portraits.

IN recent years it has been thought highly fashionable to handle portraits in the shallow medium of high key lighting and expression. The practice has been widespread and its shortcomings have been many. I dissent quite violently from the high key cult and offer this as my own viewpoint.

A walk through any art museum makes one realize that past and contemporary masters of portrait technique have singularly avoided the domain of the high key. Instead their works indicate a fine sense of concern for the surroundings with which ultimately the portrait may be expected to associate. The choice seems to be fully for low key treatment.

A portrait in any medium has as its prime objective the capture and translation of the individuality of the subject. The portrait photographer gets down to business on the simple premise that he has a brief interval in which to evaluate his sitter and employ his skill and imagination to the best possible advantage. The artist is more fortunate because of his necessarily longer period of acquaintance with his subject. The photographer must—or at least should—fall back on the simple, elementary rules which have guided creative effort down through time. His taste and imagination complete the final result.

Facial expression is the vital factor in every portrait. A sense of tact and a knowledge of human nature help greatly in establishing the correct method of securing this when dealing with different individuals. Since the eyes are both focal points and keys to facial expression they require special attention and I believe firmly that both eyes should always be included. Their direction should be normal for the composition at hand, and not strained. They must be clear, with detail in the pupils and without blocking shadows in the eye sockets. No portrait which lacks eye appeal will claim attention.

There are many good reasons for avoiding broad or forced smiles, chief among them that the photographer is not concerned with portraying simulated emotions but seeks to present

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Evansville, Indiana



A somewhat more advanced naturalistic commentary, the composition of the *Portrait of a Young Man* (Fig. 10) is used by the famous artist of the past group (Fig. 11). The drawing is made from study, and caricature, and the developed *Portrait of a Young Man* is a caricature of the artist's own face, with a glare which forms an important line and feature. The aim should be to suggest the surface of a natural skin texture, the shadows being not as they do in a natural skin, but with no attempt to minimize them. The composition is naturalistic, then, a broad light from the other side will reduce these shadows from blackness to the required transparency. The addition of this balance light provides a diffusion to the shadows and highlights which blends together, but any marked transition to either 'lamplicity' or 'lighting tend' also to minimize such in the darkroom, as the simpler the lighting the more closely all negative, with equal each other in lighting and contrast.

The two illustrations I have selected were planned as deep time print. They represent a gradual approach to low key handling, having evolved from an earlier style which included sharper shadow definition and a more markedly dramatic handling. A certain amount of printing is apparent in each, an attempt to treat each subject as a separate personality with characteristics that required to be included in the finished portrait. Both were made with the very simple lighting arrangement shown in the diagram.

My camera is a Number 5 8x10 Ansco Studio outfit, fitted with a 21" F 5.6 Wollastone lens which, for these two portraits, was stopped to F 6.3. Exposure was instantaneous as bulb with a Packard shutter on 8x10 Ansco Triple S panchromatic film, developed in Ansco 47 for seven minutes. For low key prints I prefer slow projection papers such as Cykora or Indiatone and develop them in Ansco 103 for about three minutes or until I reach the desired value. It is sometimes necessary to "nurse" a print along in order to secure the delicate roundness so essential to portraying the human face.

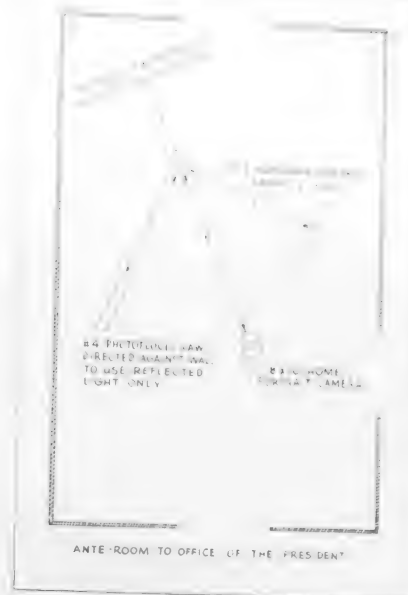
DAVID B. EDMONSTON, HON. M. PHOTOGRAPHER

Washington, District of Columbia



66

"The President of the United States"



Lighting diagram for Mr. Edmonston's portrait of President Harry S. Truman

NOT every photographer has the privilege of photographing America's politically great and for that reason I thought portraits of President Harry S. Truman and the late Chief Justice Harlan F. Stone might add interest aside from the bald facts concerning the actual photographic mechanics. Quite naturally those of us whose studios are in Washington have opportunities which are geographically denied to others; what follows merely serves to show that all people are alike to the photographer when they come within the range of his lens.

The portrait of President Truman was made while he was still Vice-President. It was taken in an anteroom to his office in the Senate Office Building. This room, about twelve by twenty feet in size, was almost entirely filled with desks, chairs and bookcases, leaving very little space for my camera, lights and background. Its chief advantage from my standpoint was that there was no appreciable daylight.

When photographing personages of importance time is a serious element. They have none to spare while a photographer sets up, adjusts and re-adjusts his apparatus. Consequently I had all my accessories in place before Mr. Truman arrived. Because there was only one available spot in the room for my background, everything else was arranged in relation to that. I knew in advance what I proposed to do, so, with my background established, I put a chair in place, then the camera and my two #4 photofloods. My main source, the lamp at the right with the tracing-cloth diffuser, was raised to a height of five feet and set to throw the light at a thirty-five degree angle. The furnishings of the room made it impossible to place my auxiliary light (on the left) far enough away so that I could illuminate the shadow side without burning it out completely. I resorted to a trick which is always serviceable in such a case to the photographer who can read light: I placed that light only four feet away but directed it against the wall. This gave me a reflected light, sufficiently reduced in volume for my purposes.

Mr. Truman is not an easy subject, due to the rather "fixed" expression which he uncon-

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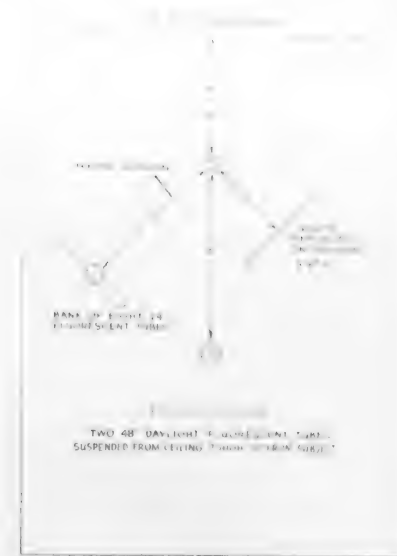
DAVID B. EDMONSTON, HON. M. PHOTOGRAPHER

Washington, District of Columbia



68

"The Late Chief Justice"



Lighting diagram for Mr. Edmonston's portrait of the late Chief Justice Harlan F. Stone

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sciously assumes when before a camera. I told him that if for just an instant I could get him interested in me, I would be able to register an expression which he would like. He replied, "I am interested in you," and as he closed his lips after the last word I snapped the shutter about as quickly as a time exposure could be made with the film and light used. This negative, one of a dozen, was the result and he liked it so well that a 30x40 print of it now hangs in The White House. This was taken with a standard 8x10 home portrait camera equipped with a Cooke portrait lens. The exposure was about a quarter-second at F 4.5 on 8x10 Defender XI panchromatic film, tank-developed by time and temperature for eight minutes in A.B.C. Pyrex. This reproduction is from a contact print on Professional Azo F. The photographs I delivered were on Professional Azo C, 8x10 contacts on 11x14 sheet prints, embossed.

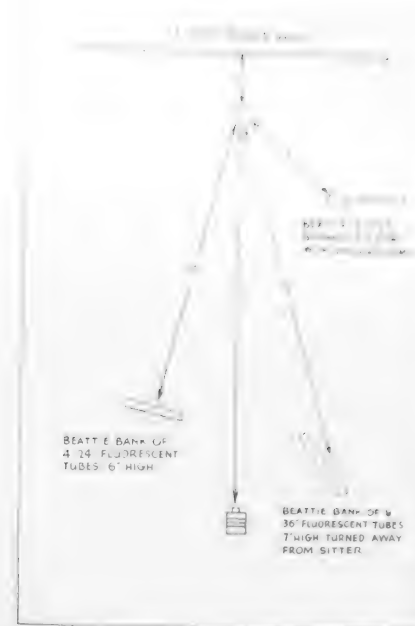
The portrait of the late Chief Justice Stone was an entirely different matter, as it was made in my studio. Like so many truly great men he was quite unassuming and arrived at the studio unattended, with his robe over his arm, donning it when the time came without the aid of a valet or other assistance. I am happy in having negatives of him in my files from the time he first entered The Congress, many years ago, until this, which was taken in 1945. It was his favorite, and we received many orders for duplicates.

I have been asked why I did not raise the lock of hair from his forehead. The answer is that he said he wished a natural picture and that he did not want one "all slicked up." When the proofs were submitted he was asked if we should remove or modify the lock of hair and he replied: "No, that's why I like it. I always have that lock hanging down and it just wouldn't be natural to have it raised or eliminated."

The diagram needs little explanation. The main source light is of course the stand of eight fluorescent tubes. The purpose of the ceiling light is merely to soften the shadows and show a

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Lighting diagram for Mr. Elliott's full length portrait of a girl graduate

THE accompanying full figure pose of a sweet girl graduate of the "Old South" is a deliberate selection on my part. The vast majority of portraits displayed in show-cases, at conventions and even in salons are of the head-and-shoulder type. For the very reason that these are easier to make, the photographer who confines himself to such close-ups tends to find himself in a rut.

Actually, with very little additional effort, attractive three-quarter and full-length poses may be produced and both the photographer and his public will be well repaid for the small extra expenditure of time and energy. Such portraits, being mutually interesting to both the subject and the cameraman, arouse a contagious enthusiasm on the part of the latter which readily wins the sitter's confidence and co-operation. That confidence secured, the battle is more than half won.

Any real portrait photographer delights in securing and composing a natural position of his sitter, whether it be one delineating the grace and charm of a lady, or the character and dignity of a man. Equally important is it to recognize good composition when one is fortunate enough to have a subject who adopts such a position without being posed.

I consider three points essential to the making of a successful portrait: posing, lighting, and expression, and believe the photographer should endeavor to secure them in that sequence. And of the three, though this is a book on lighting, most professionals will agree with me that expression is the most important. It is sad but true, though natural enough, that the public will discard the loveliest composition and the most delicate lighting in favor of a sweetly smiling woman or child, a purposeful oldster, or a "collar advertisement" picture of a younger man.

Although the costume of my subject suggests the old-fashioned girl, the lighting is entirely modern and the diagram needs no comment other than that I use my lights at considerably greater distances from the sitter than most of my contemporaries. This was taken with my Century Studio camera and a 12" F 4.5 Ilex Paragon lens stopped to F 6.3. The exposure was one second on a 5x7 Ansco Triple S orthochromatic film, developed in Elon-Pyro for nine minutes at 68°. The reproduction is from a glossy print on #2 Kodabromide.

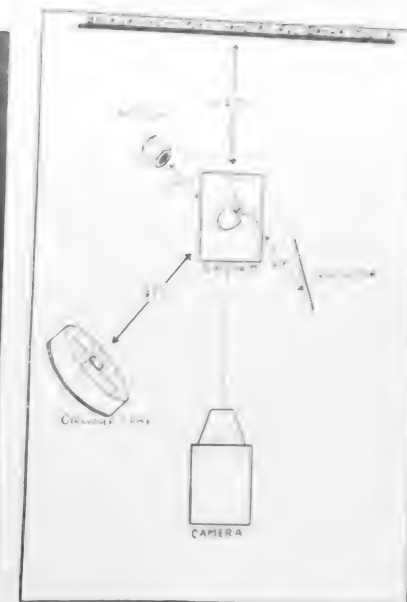
THE LATE JOHN A. ERICKSON, HON. M. PHOTOG
Erie, Pennsylvania



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Mr. Erickson's camera room, showing the subject of his portrait before the camera.



Lighting diagram for Mr. Erickson's portrait of a man.

I HAVE chosen what I prefer to call the "double source" of lighting for this demonstration to show how simply I accomplish the creation of some of my best portraits. I have played with this type of lighting for many years, and have experimented with it technically in all phases from the use of daylight as the principal source to the latest in fluorescent lighting. It is my favorite for men because it produces and accentuates that strength and character of the features which is so much desired in male portraits. Then, too, it is very simple since it calls for the use of only two lights and a reflector. I have often felt that unnecessary equipment surrounding the subject not only confuses him to the point of distraction, but sometimes tends to make him uneasy. The less equipment used, the less complicated becomes the lighting problem.

Speaking for myself, above all else I am very fussy about my subject. Once I have him seated I am deliberately slow in arranging and turning on my lights so that his interest is caught then excited, and finally satisfied when he learns the purpose of my arrangement. Thus I accomplish two of the most important factors of camera room work, a satisfactory lighting and the unconscious relaxation of my subject. My sitter is always elevated on a platform which is six inches high with a surface measurement of thirty-one by forty-eight inches. I prefer not to look down at the sitter and therefore work with this platform which brings his head on a level with my eyes. In order to allow myself sufficient room for working around the sitter from all directions I generally place him five to six feet from the background, which is a plain Venetian red brown.

The Schmidt light which I use for general illumination has a circular dimension of forty-two inches and contains twelve 18" 15-watt G-E daylight fluorescent tubes. Its "wagon-wheel" arrangement of tubes always draws comments from my sitters. For this sitting it was placed eight feet from the subject and the center of the light was seven and a half feet from the floor. The second light is a Photogenic Sun-Spot and was placed four feet from the subject's head and at a height from the floor of five and a half feet. A 500-watt T-20 blue projection lamp was used in

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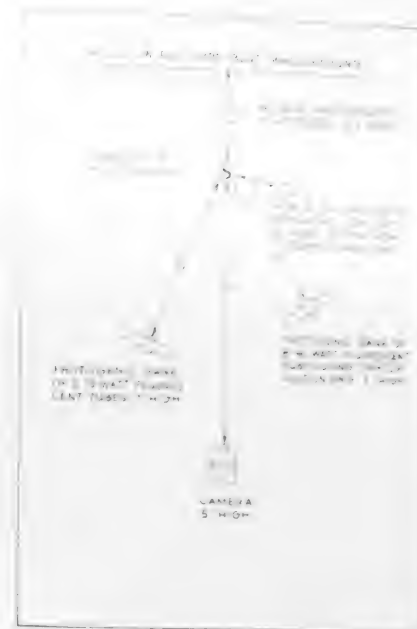
73

SAM S. FAUSETT, M. PHOTOG.

Conway, Arkansas



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Lighting diagram for Mr. Fausett's three-quarter portrait of a man.

THE accompanying three-quarter length portrait was a deliberate selection on my part because I get so tired of seeing the ordinary head-and-shoulders and feel that far more can be accomplished with a pose of this type, especially when one's sitter is a man. This offers a far more satisfactory impression of what the subject actually is and looks like. Another thing I often dislike about pictures of men is the expression of grim determination which many photographers seem to think essential. What I prefer to portray is a sense of well-being and self-confidence. This, however, does not mean a broad smile and thrown-out chest, for these only carry us to the other extreme and make our subject look ridiculous. The secret lies in a relaxed position and a pair of expressive eyes.

As the diagram shows very clearly, my basic light was the center section of the large eight-tube fluorescent bank placed to the right of the camera. This was then softened by a fill-in light, the small five-tube fluorescent to the left of the camera and farther from the subject. Finally the Sun-Spot, with diaphragm half open, was brought in close to secure greater detail in the modeling of the face. This one light, with its ability to bring out texture and lines, is really the light that makes the picture.

Although I have quite a complete battery of lights of all types I seldom use them unless I am attempting something out of the ordinary. In fact I have found such experimentation all too easily gets me into what might be termed a "light-happy" condition, whereupon I have to start all over again and reaccustom myself to my more tried and true style of simple, direct lighting.

This portrait was made with a Century Master Studio outfit, equipped with a Series 6 151 $\frac{1}{2}$ " focus Cooke lens in an Ilexpo shutter. The exposure was instantaneous at F. 5.6 on 5x7 Super Panchro Press Type B film, developed for eight minutes in DK-60a at 68°. The illustration is from a print on Opal G.

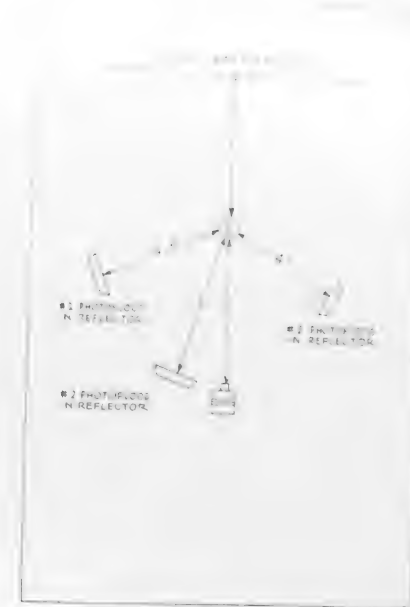
75

FERENZ FEDOR, M. PHOTOG.

Greenwich, Connecticut



"Texture Portrait of Mr. Serna"



Lighting diagram for Mr. Fedor's texture portrait of Mr. Serna

GRANTING that many who buy and read this book will be competent portrait photographers, I shall act on the assumption that fully as many, if not more, will be amateurs searching for the secret of making good portraits. Therefore I am going to presume on the normal space allotted a demonstration to present a highly condensed lecture on lighting. Being required however, to submit an example or two of my own work, permit me to get that out of the way first because, interesting though portraits and their lighting diagrams may be, I question their genuine value as a help to the beginner or even the experienced worker.

Take then, my accompanying portrait of the late and greatly loved Ernie Pyle. Here we have an outdoor profile made against the wall of a simple frame building, the siding in shadow forming an interesting background pattern as a foil for the strongly lighted features, and contrasting against the brightly sunlit end of the building. No setting could be more suitable for a man like Ernie Pyle, who loved the outdoors and simple things. The last thing necessary here is a lighting diagram. This was taken at F 11 at one one-hundredth second on Super XX panchromatic film with a 2 1/4 x 2 1/4 Rolleicord in the full bright sunlight of New Mexico. Even in the shadow under the hat, including the back of the neck and the throat, there is ample detail—if the engraver does not lose it.

The other portrait, of Mr. Serna, is what I like to call a "Texture picture." It is a studio portrait and the accompanying lighting diagram speaks for itself. This was taken with a 4x5 Speed Graphic, the exposure being one twenty-fifth second at F 8 on Super XX panchromatic film. Having thus briefly fulfilled my obligations, I will proceed with what I hope will be far more helpful to the student of lighting.

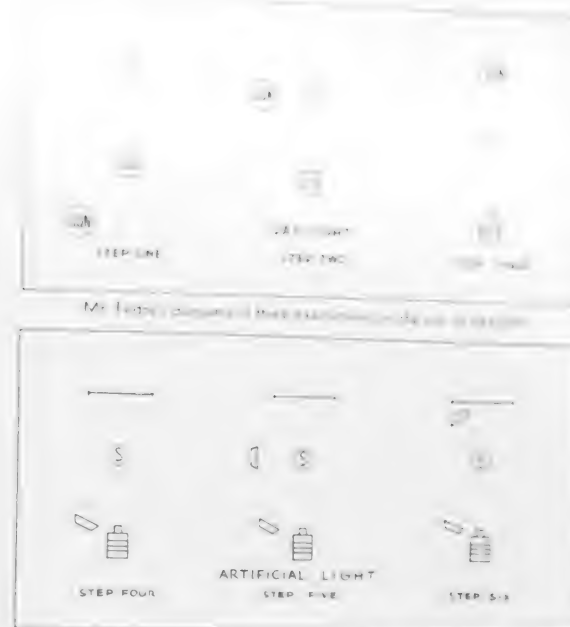
In the eighteen hundreds, photographers, coping with wet plates, bulky cameras and excessive weight, probably could not realize that their successors of this century would enjoy not merely compact, fast-working equipment, but so much of it that their problems would be mul-

FERENZ FEDOR, M PHOTOG

Greenwich, Connecticut



The Late Ernie Pyle



Mr. Fedor's diagrams of three experiments in the control of light.

multiplied tenfold. When it came to the matter of lighting in the early days of photography the cameraman, though he doubtless did not think so then, had an easy time because he had only one source of light to contend with—the sun. With this common phenomenon he accomplished wonders, in fact he made much better pictures than many of us are making today. In those days one of the brighter workers discovered two little rules that have endured through the years. Keep your lighting simple and use one source. Perhaps that was the secret of their success. These two rules are so elementary that I repeat them with apology, sticking to them in this day and age is like asking the reader to return to the box camera administration—keep the sun over your shoulder. For the same reason portrait lighting is simple and easily understood. The student has a point to remember, namely, that starting point is the sun, and the sun over your shoulder.

Only when a cameraman can produce a portrait in a high key (subject permitting), low key, full moon, candlelight and gleam lighting with daylight or any type of artificial arrangement—incandescent, fluorescent, mercury vapor, flash or spotlight—can he justly say that he has the lighting problem under control. The following simple experiments will soon determine that point for us. We will commence with the sun as our sole source of light. We will need our camera, tripod, film, reflector, meter, and model.

STEP ONE. Pick an early morning or late afternoon before 9:00 A.M. or after 4:00 P.M., to insure a low sun over your shoulder, and select a medium speed panchromatic film such as Super XX. Now place the subject facing the sun and in the least possible shadow. Take a meter reading and shoot three exposures at that reading, three more at one stop less and three more at one stop greater than the reading. For example, with a meter reading of one one-hundredth



Lighting diagram for Mr. Fink's portrait vignette of a young lady

IN my early years in photography I worked largely by impulse, attempting to express ideas which were then guided only by my limited knowledge. Naturally my accomplishments were spotty, varied, and—to me—far from satisfactory. As the years passed I began to realize that only through consistent study of all sides of photography—the technical as well as the artistic—would the quality of my photographs be raised to a proper level. So today I continue to study and save my impulses for idle moments. To think pictorially, a photographer must first know what pictorial thinking is. Once this is appreciated it becomes possible to translate one's pictorial thoughts into reality, to transfer one's own visualization of a sitter onto the sheet of paper that becomes a photograph. In other words, the deliberately developed habit of absorbing photographic principles and artistic appreciation is essential to the photographer who wishes to advance himself.

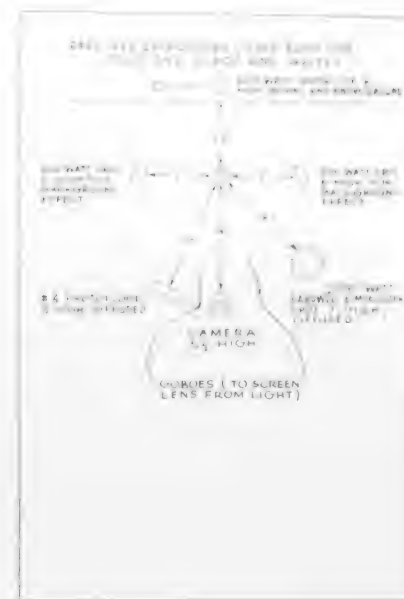
This means the study of books on suitable topics, the visiting of museums and art exhibits and attendance at photographic conventions in order to learn from others, culminating finally in the desire to make photographs which are rich in pictorial beauty. Even the urge to create such photographs has its compensations, for what can offer greater pleasure to the photographer than the selection, from a sitter's moods as emotions play over the face, of an expression which truly portrays that person's character?

But pictorial education is not by itself, in my opinion, sufficient. The photographer must not only know the rules of good composition but when and how he may safely depart from them. He must understand color, light and tone values, three factors we professionals usually group as the ability to "read" light. He must also have an appreciation of grace and harmony or his portraits will fall short in that element of perfection which we like to call "beauty."

Having disposed of that little introductory sermon let me add a few words about my methods. After many years of experiment in my camera room, during which time I worked out

GLEN FISHBACK

Sacramento, California



Lighting diagram for Mr. Fishback's portrait illustrating the correction of a broken nose.

MOST portrait lighting, as I see it, consists chiefly of minor variations from a comparatively few sound and accepted patterns. I have therefore deliberately chosen a photograph to illustrate what can be done for a subject who has certain defects, by the proper application of make-up, choice of pose and camera placement and, of course, the lighting. This young lady was unfortunate in having a broken nose which caused it to appear quite flat and unnatural at the bridge. Though an extremely nice girl she would definitely not, because of this impairment ordinarily be chosen as a model. Nevertheless we were able to use this photograph of her as the cover picture for a state publication.

Our first step was to use as a base on her face the regular Max Factor #26 pancake make-up which we use for all our women sitters. Then we took #29 pancake to darken the flat portion on either side of the bridge of her nose, blending it in with the normal cheek make-up and the top of the nose. Finally we finished with a highlight down the center of the nose, using Max Factor's #12 white liner, which was in turn blended with the sides so it would not appear too obvious. Make-up was used also on her neck and shoulders to smooth up the skin. I have found that the use of make-up is appreciated by women who feel that it is a service to them, while so far as we are concerned it is a real help in getting satisfactory results.

Since this was to be a portrait of the glamor type, the draping of the blouse, the posing of the figure and head and the camera angle selected were all planned with that in mind. We used a forty-five degree lighting because it seemed to afford the most pleasing modeling of her face while at the same time working out to the best advantage in correcting the nose structure. The picture was taken with a 5x7 Ansco Universal camera and a 10" F. 6.3 Tessar lens. The negative was on 5x7 Ansco Triple S panchromatic film, developed in A.B.C. Pyro. All of my portrait prints are made on Opal G, developed in citric acid Amara. The reproduction is from a glossy print on Kodabromide F-2 developed in D-72. Although the make-up and lighting solved

LOUIS F. GARCIA, M. PHOTOG.

Pocono Manor and Buck Hill Falls, Pennsylvania, and New York City



Lighting diagram for Mr. Garcia's portrait "Judy"

NINETY per cent of all the portraits I have ever made have been under conditions which professionals classify as home portraiture. Yet I do not make home portraits, but rather portraits in the home, since I never attempt to use the home surroundings as a background or setting. This was a deliberate decision on my part, because most pictures of this type which I have seen project the background so prominently that it detracts too greatly from the main interest which in the case of a portrait, should always be the sitter. There are many successful photographers who feel that the home atmosphere is necessary in home portraiture and who will quite naturally disagree with me, but it has always been my preference to emphasize the sitter and keep my backgrounds as plain as possible.

My equipment is very simple. It includes two small floodlights which are nothing more than 2 photofloods in metal reflectors, a #1 photoflood in a still smaller reflector for lighting my background, a spotlight containing a T-20 400-watt lamp, and one foil reflector. All my lights are screened with architects' tracing-cloth, which I remove only when I am making instantaneous exposures such as those of children or large groups. With these four lights I am in position to photograph adults, children, groups and brides, all in the home. My background is a piece of brown velvet about six feet wide and seven feet high, which is attached to a simple folding tripod stand with a horizontal cross-bar. This has served me for more than fifteen years. Occasionally I use a plain wall when one is available, but 90 per cent of my portraits are made against this ground.

My camera is an Ansco 5x7 Home Portrait and for the past two years I have limited myself to two lenses. For adults (see my illustration of the young lady) I use a 14 $\frac{1}{2}$ " Wollensak Verito, always stopped to not less than F 8, with a Packard shutter fast bulb exposure. My portraits of children (see the other illustration) are all instantaneous exposures with a Packard pin-type shutter, fitted to an F 6.3 Goerz Dagor used wide open. All of my negatives are on

LOUIS F. GARCIA, M. PHOTOG.

Pocono Manor and Buck Hill Falls, Pennsylvania, and New York City



Lighting diagram for Mr. Garcia's portrait "Patsy"

I finished with 1000 pages

5x7 Eastman SS orthochromatic film. I have become so accustomed to this concentration of equipment that I no longer have to give it any thought. I know exactly what I can expect from it under any given conditions and can accordingly devote my chief efforts to the all-important objective of securing the best possible portrait of my subject.

When photographing women, whether young or old, my attempt is to dignify them, to make them look like thoroughbreds. This is not especially difficult. I have found that by having a subject toss her head back slightly, which presents a touch of lifted chin toward the camera, I obtain an attitude of mildly proud haughtiness which conveys exactly the desired effect. The pose is one, too, which appeals to my subjects.

My portraits of children I print reasonably sharp, but in the case of older people I diffuse somewhat. I take issue with the school which demands that every photograph be so sharp as to appear wiry. Such sharpness is quite all right for those who demand it, or for commercial purposes, but it seems to me that for portraiture a slight softening of the focus brings a picture more into harmony with what the human eye actually sees when looking at the subject. I do not favor at all that type of portraiture, so frequently seen today, which is so sharp that the pores of the skin stand out in all their glory.

GENE GARRETT

Minneapolis, Minnesota



Lighting diagram for Mr. Garrett's portrait of Doctor Myron Henry

FOR this demonstration I have selected the portrait of Doctor Myron Henry, a famous specialist and a good friend of mine. In this picture the doctor talks to me and his expression is friendly as well as conversational. The turn of the head and the additional turn of the eyes in the same direction add a dramatic touch very characteristic of this subject.

Character portraits have a very definite place in salons and exhibitions. It is true that our everyday photographs cannot all be character portraits but they can, and should be, characteristic of the sitters. Such portraits are the ones which appeal to the subjects as well as to their families and friends.

I like my portraits to convey an interested, animated expression and have found the best way to break the ice for such a result is to extend a sincerely warm greeting when the subject first enters the camera room. Some people are self-conscious, some enter the room subject to a certain degree of nervous tension, others are out and out "camera shy." Upon our success in breaking down such repressions stands our chance of securing a true personality portrait.

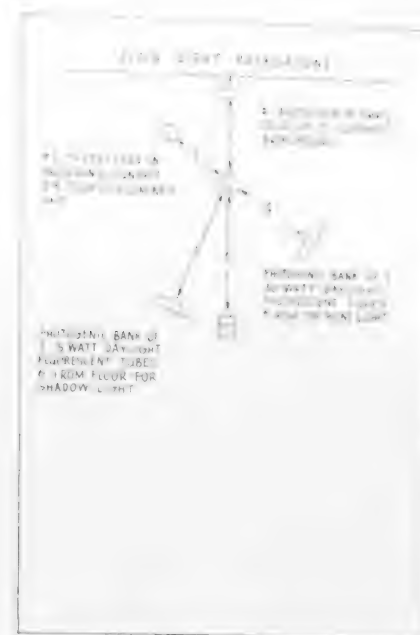
The lens used for this photograph was an 18 Wollensak Verito, stopped to F 8. The exposure was quick bulb with a silent shutter on 5x7 fast orthochromatic film, developed in DK-76 for twelve minutes at 66°. The reproduction is from an 11x14 projection on Opal C, developed for thirty seconds in a soft developer and then dry and a quarter minutes in D 50, following which it was toned in a Nelson gold bath. The background effect was worked in by hand on Trioxolene attached to the back of the negative.

MAYME GERHARD

Saint Louis, Missouri



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Lighting diagram for Miss Gerhardt's portrait of a young girl

I HAVE been making photographs for a good many years and am still to be convinced that the so-called "modern" and glamor lightings will not pass, in the not too distant future, as have so many other fleeting photographic fads. The very youngsters who are today so taken with these over-brilliant lightings and their resultant too-heavy shadows will, as they grow older, find greater pleasure and enjoyment in the portraits of themselves which were made by the standard techniques which time has proven sound. I have no quarrel with the glamor photographer and myself make such portraits upon demand, but to those who are trying either to learn portraiture or to improve their photographic craftsmanship my advice is first to become so familiar with the standard lightings that their use is second nature. Then depart from them to whatever extent you wish; at least your photographs will be basically correct.

There is an inscription on our famous Saint Louis Art Museum which impresses me more strongly every time I pass the building. It reads: "Art still has truth, take refuge there." I can remember when photography was not considered art by any museum and I can also remember the considerable furore in the art world generally when one or two museum directors gingerly opened their doors and accepted an occasional photograph for display. Today in our own art museum and in many others, exhibits of photographs are almost a commonplace. True, many of these are by modernists who confound our long recognized principles of lighting and composition. All the more, to my mind, do they emphasize by their very difference the solid values to be found in the portraiture of those craftsmen who still feel the necessity for adequate balance of light and shadow combined with correct composition.

Accordingly my contribution is a simple portrait of the type I prefer to make, one which retains likeness, emphasizes the features without over-lighting them and achieves a satisfactory roundness and projection of the form from the flat surface of the paper. I used my 8x10 Century camera with a reducing back and a 19" Ross lens stopped to F 8. This was an instantaneous

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PAUL LINWOOD GITTINGS, M. PHOTOG

Houston, Texas



Lighting diagram for Mr. Gittings' portrait of a young lady

If this book has any value, much of it will lie in its proof that photographic results, not methods, count. Among other things it should prove quite definitely that, eliminating what might be termed fads in lighting, professional photographers divide rather sharply into two schools. The first—and I think it includes many of the older craftsmen—consists of those who reduce their lighting equipment to the absolute minimum. In the second are those like me who prefer to obtain their effects through the use of a large number of light sources. Both schools are flourishing and it is for the reader to judge for himself which method will best fit his temperament and his abilities. I doubt if many could tell which of the hundred or more portraits in these pages had been made with few or many lights provided the illustrations were spread before them without names, diagrams, or other identifying matter.

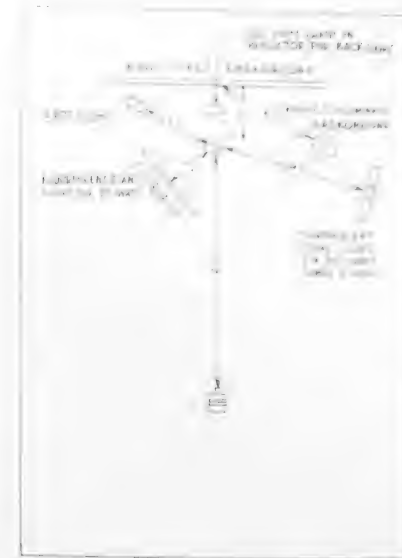
I am a strong believer in fluorescent light although, like most other portraitists, I have found that it must be supplemented with incandescent. In combining these two types of light I have learned how important it is for the auxiliary lights to be reduced to the common factor of daylight by means of blue filters, thus bringing them all in balance with the main, fluorescent source. If someone were to come to me tomorrow with a thousand dollars and a request to teach him the one thing most important in the successful making of portraits, I would tell him of this all-blue-filtered light and feel that I had earned my money. If the reader is skeptical, let him light a subject in his normal manner but with all lights covered with blue filters, and then remove just one filter from one light. If he can read light at all he will get the point immediately.

With this combination subjects are never ill at ease from glare. Note, for example, how wide open are the eyes of the young lady in this illustration, and yet how completely without strain. Using the blue filters also over-corrects for panchromatic film. The result is an orthochromatic rendering of flesh tones with what might be called panchromatic "sympathies." We can also, as in this case, capture the feeling of blondness in the tones of the hair and face. When one has a blond sitter it is vital to make that blondness evident in the resulting portrait.

This was made with an 8x10 Century Studio camera. The lens was a 12" Pinkham & Smith

B. C. GOLLING, M. PHOTOG.

Saint Paul, Minnesota



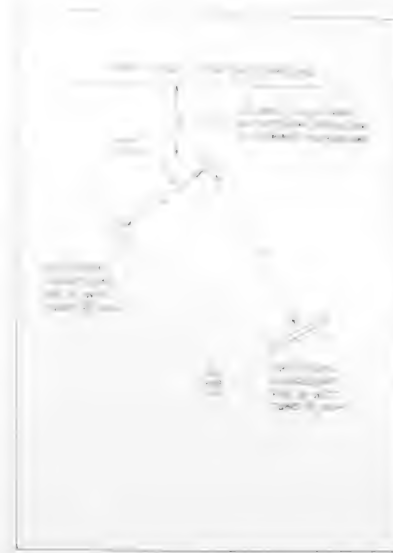
Lighting diagram for Mr. Golling's portrait of a high school senior.

THIS portrait of a high school senior is a quite faithful example of what might be termed the run-of-mine work of our studio. I am still of the old school and prefer straight photography to all of the spotlightings, shadow effects, diagonal compositions and other styles of portraiture usually lumped under the descriptive term "modern." All serve a certain purpose and like other professionals, I make them when desired. All are fads which go through their respective cycles, but the portraits which are based on sound lighting, natural expression and artistic composition are those that live with us.

Though I term myself as of the old school some will take issue with me on the basis that my lighting is more elaborate. Basically, however, it remains the fundamental main source and is a modeling light, although in the case of a subject like this I add a spotlight to pick up the hair, a backlight for depth and a Keglite to illuminate the background. I think the additional lights produce a more pleasing result. I like to work with my modeling light rather close to the subject, but to avoid harshness diffuse it with a large screen.

This portrait was made with a 16" 3A F 4.5 Dallmeyer stopped to F 5.6. The exposure was a half second on a split 5x7 Eastman Ortho X film, developed for six minutes in DK-60 at 70°. The glossy print used for this reproduction is on Defender Velour Black R-2 developed for two minutes in D-52 at 68°.

RAY W. GOODRICH, M. PHOTOG.
Winston-Salem, North Carolina



Lighting diagram for Mr. Goodrich's portrait of Bishop Pfuhl

AS I study the various types of portraits I have made over a period of years, I discern a continuing trend toward simplicity in light and composition. This, I believe, is due as much to the insistence of my clientele for photographs of this type as to my own personal preference. While multiple lighting does produce pictures which are eye-catching I do not think these have a lasting appeal or afford the satisfaction of those secured with the more simple lighting effects. After all, I want my portraits to give permanent pleasure.

Most of my photographs, of both men and women, are made with one or two lights and the occasional use of a reflector and screen. I do not want to give the impression that I do not make, or disapprove of, the so-called glamor type of portrait, because such photographs have their place. When they are requested, I light and pose my subject accordingly but I always make and submit in addition one or two that might be termed good plain photographs.

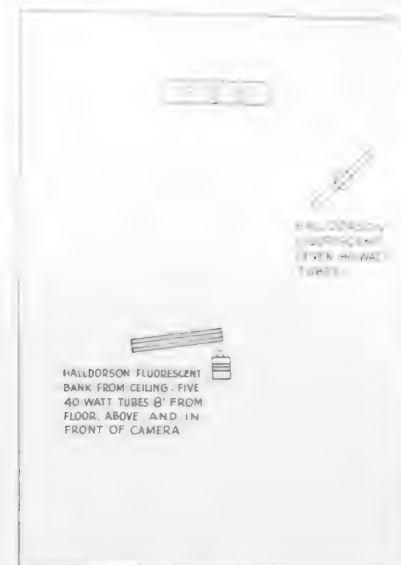
For this demonstration I have chosen a simple example of lighting and composition, one which can be produced easily without tiring either the subject or the photographer. I think this portrait of Bishop J. Kenneth Pfuhl, Executive Chairman of the Directory of the Worldwide Moravian Church, displays his dignity and great strength of character as well as his lovable disposition.

In this instance I have substituted a second light near the camera for a reflector. Each of the two lights contains five 15-watt fluorescent tubes so placed in Photogenic cabinets that there is a definite concentration of light in the center of the light area. The main source was at the left, close to the subject, with a head screen placed as indicated to reduce or soften the light on top of the head. Depth and illumination of the ground were provided by a 100-watt blue lamp in a small reflector behind the sitter.

The lens used was a 22" Wollensak Vento stopped to F 8 and the exposure was one second on 8x10 orthochromatic film which was developed in DK-50 for seven minutes. This reproduction was made from a glossy contact print. A more handsome result was obtained by projecting to 11x14 on Opal G, the enlargement being developed in Kodak Selectol for two minutes and then gold toned.

MAX GREEN, M. PHOTOG.

Chicago, Illinois



Lighting diagram for Mr. Green's portrait of Mrs. Kelch and her daughters

HERE is a simple, pyramidal composition in a group of mother and two children, easy to arrange, not difficult to light and not trying on the patience of the sitters. The magazine acts as a center of interest while the three heads remain sufficiently erect so the features are not obscured and the likenesses are retained.

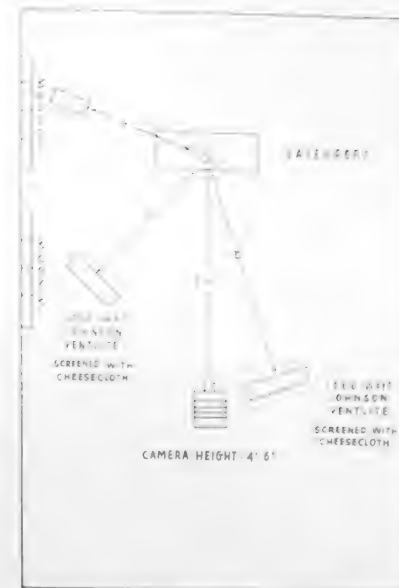
In this group of Mrs. A. P. Kelch and her daughters Suzy and Judith we have such subjects as are apt to appear at professional studios practically every day. When photographing such a group I like to have the camera room lit up before my sitters enter. This gives the children an opportunity to feel perfectly at home without delay. In many cases I find the mother over-anxious about how her children will appear and consequently watching the arrangement of camera and lights. This I correct immediately by giving the group a book or magazine to look at. That holds their attention, permits me to go about placing my camera and lights, and often makes possible an exposure or two before I am ready for them to look up. By that time they are at ease, accustomed to my moving around and eager to conform to any changes of position which I may suggest.

For groups of this type the simpler the lighting, the more suitable and flattering it will be. Simplicity in lighting can never be overdone and simple lightings, because they never draw attention from the subjects, produce the photographs which are still admired and enjoyed years later. I use no screens or reflectors of any kind and very few spots. To me they are unnecessary. From the light tones of the walls and ceiling of my camera room ample light is reflected to produce proper balance.

This group was made with my Century Master Studio camera, fitted with a 14 $\frac{1}{2}$ " Bausch & Lomb Tessar lens stopped to F 4.5. The exposure was on 5x7 Eastman SS orthochromatic film, developed in DK-60.

MAX HABRECHT, M. PHOTOG.

Traverse City, Michigan



Lighting diagram for Mr. Habrecht's portrait of a baby

ALTHOUGH I make many home portraits, of which the accompanying illustration is an example, my attitude toward this type of photography differs from that held by most of its practitioners. Usually there is a deliberate endeavor to make a home portrait recognizable as such through the inclusion of familiar objects. I take the opposite position. I do not attempt to bring the home itself into the photograph because I believe the furnishings should be eliminated as much as possible.

In my twenty-odd years of experience as a home portraitist I have discovered that pictures with plain backgrounds and with no furniture showing are much preferred. Consequently I try to find a plain wall space against which to place my subject, and because so many homes offer nothing of the sort I always carry a plain ground with me. Take this portrait as an example. The baby was first placed on a sofa, a piece of furniture undoubtedly familiar to the relatives and friends of the family. It was an excellent place to put the baby but the pattern consisted of disturbingly bold stripes so I covered it with a piece of white satin. Then, because I always like a little touch of added interest in my portraits, I placed a plant so that just a few leaves would fall into the picture in the upper left corner.

This portrait was taken with an 8x10 Ansco home portrait camera and an F 4.5 Wollensak Velostigmat lens stopped to F 5.6. The exposure was instantaneous with a Packard Speed shutter. The two Johnson Ventilites shown in the diagram are my standard home portrait equipment and in each I use 1,000-watt clear G-E lamps, diffused with cheese-cloth. In the spot I have a #1 photoflood. The light at the left of the camera was six feet high, and that at the right five feet six inches high and the spot was six feet high. The negative is a 5x7 Ansco SS Plenachrome film, which was developed in Elon-Pyro. The print is on Kodalure G, developed in D-52.

JANE HARDCASTLE

Niagara Falls, New York



Lighting diagram for Miss Hardcastle's portrait of a man

IN selecting a portrait for this demonstration, I have chosen one I made very recently of a prominent executive of our city, and have done so because the photograph emphasizes the two points I consider necessary for good portraiture. It reflects the personality of my sitter, and the light is well balanced, simple, and properly adapted to the subject. I happen to favor that school of portraitists which considers a portrait a failure unless it succeeds in capturing the sitter's personality and which, the better to secure that end, finds that a few lights properly placed are ample for the purpose.

I give unstintingly of my time and energy in an effort to establish a common ground of interest between the sitter and myself, and as we talk I make mental notes of those facial expressions which best convey my sitter's character. I never hurry. I never ask a sitter to "hold" an expression or look at some special spot. When the mechanical job of placing my lights is over and I am ready to make the exposure, I walk to the place where I want the eyes directed and maneuver the conversation so that at the desired moment I am doing the talking. The sitter naturally looks at me, and the exposure is made. In brief, my technique consists of putting the sitter at ease and making him forget he is being photographed, plus handling intelligently a very few lights.

Notice especially the large fluorescent bank shown in the diagram. This, the main light, is turned slightly toward the camera. It thus places the ear in shadow and makes a head screen unnecessary. Like other photographers, I have found that fluorescent light, despite its many advantages, lacks the strength to give my lightings emphasis. To remedy that deficiency I have had soldered to the top of the bank, at one end, a goose-neck reflector in which I use a #1 photoflood. This supplies just the pick-up I want. Because of the way I use my main light, my lens is deeply hooded.

I make all my sittings with the three lights shown in the diagram, occasionally adding a

BLANCHE HARDWICKE

Lakewood, Ohio



Miss Hardwicke's method of posing
a very young baby



Lighting diagram for Miss Hardwicke's
portrait of a baby

WITH some hundreds of thousands of new babies entering the world annually, it is important that good portraits of these new arrivals be obtained at as early an age as possible. I have accordingly chosen this picture to demonstrate my method, which I think both simple and easy of photographing babies at the tender age of twelve weeks. Its selection from among many similar photographs was prompted because, displayed in my reception room, it has aroused so much more interest among visitors than others which I considered of equal or even greater merit.

Because I think delicate tones appropriate in photographs of children I prefer a plain background. Mine is wall-board covered with white water-paint. To build my subject more easily up to eye level I work with a platform thirty-two inches wide, forty-eight inches long and sixteen inches high. For tiny babies, such as this one, I place a child's settee on this platform with the back of the settee toward the camera. Then I build it up with pillows so that when the baby is placed on its stomach the head is slightly higher than the feet and the arms are well over the back of the settee. The small illustration, a side view, tells the story quicker than words. This is a comfortable and safe pose for the baby and makes it easy to obtain any desired expression. Twin babies can be handled in the same manner.

I prefer a double source of lighting. A Photogenic Hi-Power bank of six 36" tubes is placed at the right for general illumination, about five feet from the subject and from four to five feet high. At the left, for bringing out the highlights, I use another Photogenic light with a 1,000-watt lamp behind a spun-glass diffuser. All of my work is done in my studio with an 8x10 Century Studio camera and a Cooke Portrait lens. This portrait was made at F 5.6 with an instantaneous Packard shutter exposure on 3x5 Eastman SS orthochromatic film, developed in DK-50 for eight minutes. The print is a projection on Opal G, developed in DK-52.

AUGUST HEINEMANN

Chicago, Illinois



Lighting diagram for Mr. Heinemann's portrait of a standing bride.

My studio has specialized for years in wedding photographs and the entire building was planned for that purpose. Naturally, then, my two contributions are of a bride and a bride with her attendants. I would have liked to include a larger group but detail in the costumes is an all-important feature of all wedding pictures so it seemed wise to limit myself to these two photographs. The figures in both are large enough so that the necessary reduction for reproduction will not cause too great a loss in this respect.

Our camera room is twenty-five by forty feet, necessary because we are frequently confronted with very large groups and the length enables us to use long focus lenses. I do not believe in a multiplicity of accessories; it is the bride and her party that should attract the attention, not a conglomeration of pillars, drapes, and scenic effects. Our groups are photographed directly against one wall of the studio which has been painted a flat rose color, and except when a group is very large, I place my subjects on a semi-circular platform eight inches high. This gives added stature and dignity and also makes it possible to drape the train of the bride's gown in a manner which suitably displays it without drawing the material far into the foreground and thus dwarfing the figure. A similar, though smaller, platform is used when photographing the bride alone and for such portraits I customarily move into place behind the platform a plain, black felt background.

My lights are always in place before the wedding party enters the camera room. This makes for speed and I have found that the more quickly the sitting can be completed the more natural the expressions that will be secured. A bride is under a considerable mental strain on her wedding day and often physically fatigued as well before she reaches the studio. I keep up a flow of conversation not only to maintain her interest but so she will forget that she is being photographed.

Three mercury vapor lamps suspended from the ceiling eleven feet from the floor comprise

AUGUST HEINEMANN

Chicago, Illinois



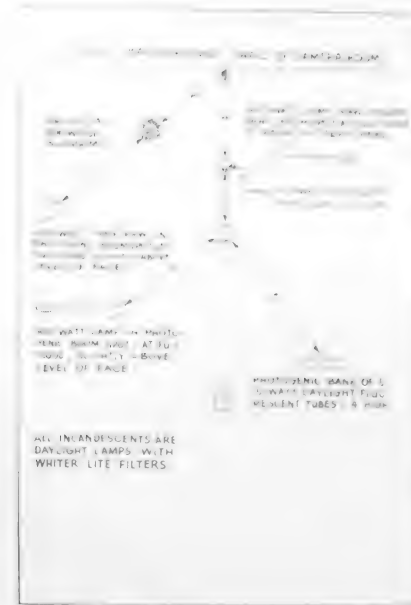
Lighting diagram for Mr. Heinemann's wedding about

and of the group.

my main source of lighting and give me a nice even light all over the studio. I prefer mercury vapor because I think it carries better into the shadows especially when working with large groups. We do have a large skylight, but seldom use it. The color of the mercury vapor light is offset through the use of fluorescent and incandescent lights as indicated in my two diagrams.

I use an 8x10 Century Studio camera, normally with the lens four and a half feet from the floor. The lens is an 18.4" 11x14 Series 6 Cooke in an Ilex shutter. For these two photographs it was stopped to F 8 and the exposure was one second on 8x10 Eastman Ortho X film, developed in Elon-Pyro D-7 for fifteen minutes at 68°. The prints are on Defender BB-1 developed in D-52 for one and a half minutes at 68°.

MARVIN E. HELGESEN, M. PHOTOG.
Janesville, Wisconsin



Lighting diagram for Mr. Helgesen's diagonal composition of a young lady

I AM extremely fond of the diagonal type of composition in a horizontal space; that is the reason for the selection of this portrait for my demonstration. A "must" in this type of portraiture of women is a light and airy atmosphere, which I feel has been successfully achieved. This is aided by giving the background a note of summer or spring, accomplished in this case by using an artificial spray of dogwood as shown in the diagram. No retouching was done on the background nor was there any dodging or burning-in on the print. I have found the treatment used here is the most popular in modern glamor portraiture. Also it is in good taste—many glamor shots are not.

Referring again to the diagram, the reader will notice that the modeling light is a boom spot, on full flood and raw, directed into the face. Before you wave your arms in the air and say, "You can't do that! The lighting will be flat," I suggest you study the picture itself. Assuming that the engraver does not lose too much of the original, I am sure you will agree that this lighting cannot possibly be called flat. A look into the old physics book you have long forgotten will remind you that "the angle of incidence is equal to the angle of reflection": all planes of the face that are parallel to the light source will be registered as highlights, and all planes that curve away will be recorded as halftones and shadows.

I make nearly all my sittings with this type of lighting except when I am working with older people. Then I prefer fluorescent illumination in a basic forty-five degree arrangement. When using raw spots as modeling lights, I might add that I have seldom handled them as forty-five degree lights and under no circumstances should they be directed into the long side of the face. To do this would surely result in a very flat lighting and lack of modeling. If you were seeking a very dramatic and contrasty lighting, then the raw spot could be used at the forty-five degree angle, directed toward the short side of the face.

Now to consider the fill-in light. The degree or amount of fill-in needed is directly related

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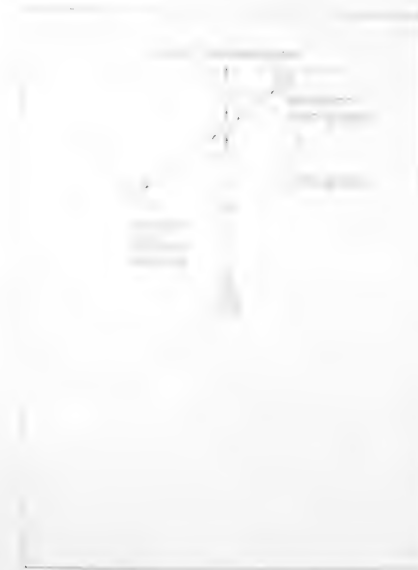
Lighting diagram for Mr. Hirshburg's portrait "Singin' Sam"

WHAT most appeals to me about my accompanying portrait of "Singin' Sam," the radio star, is its solidity of form (attained through what I consider to be a correct lighting) and skin texture. It is my opinion that character portraits should deliberately be lighted to show skin texture to a maximum degree. It may be well for me to define what I mean by a "character" portrait because I fully understand that the average sitter will not be pleased with such a result. A character portrait then, as I understand the term, is a conscious effort engaged in by a photographer to produce an effect or a characterization when he finds himself confronted by a personage of public note or unusual mannerisms. This also applies, quite naturally, to any carefully selected model whose dramatic, wrinkled, wind-blown, or foreign countenance appeals to us because of its photogenic possibilities. In either instance I feel that a large head is called for and a large head, to be natural and lifelike, must portray the skin texture as it actually appears.

In making such characterizations I believe that the use of reflectors or lights intended to act as substitutes for reflectors defeat this purpose by over-illuminating or flattening out the very areas which should be emphasized. The two main sources of light, which are the spotlight that picks up the planes of the features and the light which serves as a fill-in, should first be turned away from the subject and toward the cameraman. Then, by turning them gradually back toward the subject until the greatest separation of light and shadow is attained, there will remain sufficient illumination on the shadow side of the face so that reflected light or any substitute lights will not be necessary. This method of handling the light will also give more form to the head while amplifying and emphasizing the features, thus adding greatly to the charm and interest of the portrait.

For this photograph I used my Century Studio camera with a 14" F. 4.5 Series II Wollensak Velostigmat lens. The lens was stopped to F. 5.6 and although normally I prefer a Silent shutter, in this case I substituted an Ilexpo and set it at the "snapshot" point which by some is estimated

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Lighting diagram for Mr. Hostetler's portrait of a child

I WOULD have preferred to make my contribution to this book without the use of a diagram because I propose to discuss some principles of lighting rather than a single example. A principle will always work; a lighting diagram applies to one exposure only. But I have been asked to include either a diagram or a photograph of the camera room arrangement so a diagram it is.

My lens is a 10" anastigmat used at F. 11 for bulb exposures and F. 6.3 for instantaneous shots. I like a full-timed, sharp film as our prints are all gold-toned and the automatic timers on our printing machines will afford any amount of diffusion desired. My background, permanently fixed on the wall, is just off white. Whatever shade or gradation I want in the ground I get by the use of spots. The main source light is a 1,000-watt lamp in a Johnson Ventlite with a diffuser of common galvanized screen wire and a thin sheet of spun glass. My spots are the conventional sort, though one of them has been mounted for overhead effects, the so-called glamor shots which seem so attractive to the younger generation.

I commence by placing my main light at a height that will properly illuminate the eyes, far enough to the front to get the desired shape of the nose and proper breadth of the face. There is so much variation in the planes of different faces that this is very important. The next step is to reduce this light from a full glare on the subject until the modeling is satisfactory and the sitter's eyes are relieved of unnecessary strain. This is accomplished by turning the light away from the subject and toward the camera. This can be done very quickly and is a major factor in getting a good lighting. The secondary or modeling light, sometimes called the balance or reflector light because that is its purpose and some photographers prefer to use a reflector instead, is brought into play next to soften the shadows.

It is time now to determine the shade of the background. If the subject is blond, I light the hair and keep the ground dark, thus bringing the hair into relief. Dark hair may be rendered against either a dark or light ground but ample illumination is necessary. When the subject has gray hair I subdue it, making the hair appear darker by keeping the light off the hair and using more on the ground.

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LILLIAN SHANKLIN HOUSH
Centralia, Illinois



Lighting diagram for Mrs. Housh's portrait of a child

I MAKE many photographs of children and consequently work much of the time in a high key of lighting because I think it more appropriate to the gay light-heartedness of these small sitters. I strive for expressions with animation and, though I know many will disagree with me on this point, do not object to a smiling picture even when the mouth is open and the teeth are shown, as in my illustration. It goes without saying that this is on the assumption that the teeth are attractive.

For my part I believe in ample light. This picture was made in my former studio in Houston, Texas, where I had a special camera room for children. In that room I had not only the four lights shown in the diagram but in addition a Beattie Super-Hi-Lite and two Sun Ray spots, making a total of seven lights as standard equipment. When working with children I believe a platform to be essential, and mine was fairly good size.

My main light for this picture was a Photogenic Hi-Power bank of six 30" fluorescent tubes, the pick-up light being a smaller Photogenic Hi-Power of five 15" tubes. The two lights shown in the diagram at either side behind the subject were lamps in Eastman reflectors which I had permanently fastened to the background, as this is my method of illuminating the background and at the same time backlighting my subject. Out of range of the camera, they can be turned off when not needed but are always lit, as in this case, for light ground portraits.

My camera was an 8x10 Studio, equipped with an 8x10 Bausch & Lomb Ic Tessar lens stopped to F 6.8 or F 8. The negative was made on a split 5x7 Ansco Plenachrome film and the print was an 8x10 projection on Opal G.

WILLIAM HUDLETT, CR. PHOTOG.
Bay Village, Ohio



Lighting diagram for Mr. Hudlett's genre portrait of a soldier

ALL of us who have been in business as professional photographers for many years are familiar with the occasional sitter who refuses to be satisfied with the more stereotyped portrait and insists on something "different." Few have anything more in mind than something odd or unusual in the way of a pose, but now and then the photographer is fortunate—and I use the term advisedly—in being challenged to produce what today we call a character study. Old timers in photography will recall when these were called "genres" and the leaders of the profession vied with each other to see which could arouse the greatest acclaim with his exhibit at the annual convention.

Soon after the close of World War II a young man who had been in the thick of battle, who had earned many medals including the Purple Heart, and who had spent two years in hospitals in Europe and America as a result, visited my studio upon receiving his honorable discharge from the service. The first thing he asked me was: "Can you take a picture of me that is different? I don't want the kind of thing you see every day." Nothing could have pleased me more and I told him I felt certain of satisfying him provided he would go to some unusual lengths in co-operating with me. He said he would be happy to do so. I then asked if he could obtain a helmet, a blouse and an ordinary rough work shirt, also if he would be willing to forego shaving for two or three days. He was entirely agreeable and we made an appointment for two days later.

At the appointed hour he arrived with the makings of a fine scrubby beard, a suitable shirt and a blouse, though with a helmet liner as he had not been able to procure a complete helmet. As the liner to all but the fully initiated, looks to all intents and purposes like a helmet I decided it would do. For my part, I had in the meantime selected a few branches of shrubbery from the garden and these I proceeded to place against a gray ground. I adjusted the "helmet" at a suitably rakish angle and over it sprinkled some powder from the dressing-room, allowing

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Lighting diagram for Mrs. Ildstad - portrait of a typical American girl

I HAVE selected this subject because I consider her a typical American girl and have tried satisfactorily I believe, to produce that effect by my lighting. There is no one lighting which can be called "correct" for all purposes. A balanced lighting must be attained for each face and this requires a different arrangement of lights for every sitter. The photographer who limits himself to a standardized placement of lights cannot do justice to all his sitters. The only standardization possible is that of the initial lighting in the camera room, which must be either a general diffused illumination or one strong source light. Having decided on one or the other the actual lighting of any subject starts from there. In my own work I prefer the one strong source though, when making photographs for exhibition, I often commence with a general diffused light.

This, however, is not salon portraiture, so I used for my source light a Johnson Ventlite with one 1,000-watt blue G-E photoflood diffused, eight feet high, in front of the sitter and close to the camera. This light, so positioned, places the catchlights in the eyes well away from the centers of the irises, as they should be, and the double catchlight makes for brilliancy.

This young lady had reddish blonde hair; to bring it out properly I placed a Photogenic Little Giant spotlight over the top of my background. This is the reverse side of a tapestry, painted white, and picks up lights beautifully. I feel that a small spot between the subject and the background, directed on the background, should normally be added to insure proper separation, though I do not find it necessary when, as in this case, I already have the other spot over the ground. For roundness and general illumination I next moved a Photogenic Hi-Power bank of eight 36" fluorescent tubes to a point somewhat in front of the subject and four feet to the right, six feet high, tipping it toward the subject at a forty-five degree angle. For this portrait I balanced this with a reflector but sometimes I prefer as a balance light a smaller one of four 15" fluorescent tubes on a caster base, placed somewhat higher than and usually slanted

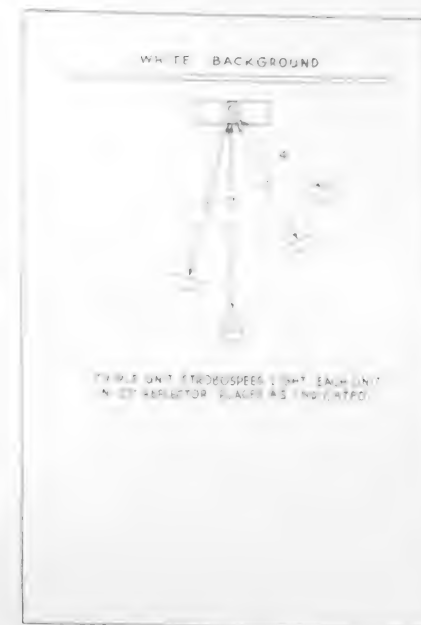
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WM. H. ISRAEL
Port Huron, Michigan



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"I Want My Daddy!" Copyright 1944 by Wm. H. Israel, Port Huron, Mich.



Lighting diagram for Mr. Israel's portrait "I Want My Daddy!"

BEING strongly in favor of stroboscopic (speedlight) lighting, still rather new to the great majority of photographers, I am submitting two illustrations which will, I hope, help to show its possibilities. Especially do I consider it an important addition to the equipment of any photographer who specializes in portraying babies and young children. The modern speedlight offers three important advantages: (1) An expression can be caught as rapidly as the photographer sees it (2) No material is wasted because of movements of the subject; (3) The exposure is so rapid that the powerful light does not affect the subject's eyes and, in fact, goes almost unnoticed. The camera room is completely free from glare and so far as the resulting portraits are concerned, the usual reaction of parents is that they like all the proofs so well they cannot decide between them. Re-sittings are virtually eliminated.

My outfit consists of three separate lights, each in a twenty-inch reflector. Two of them I use as my main source and in each of these reflectors I have installed a supplementary socket in which I use a 200-watt clear lamp. These serve to indicate the exact direction of the source light and, more important, aid me in obtaining the desired general lighting effect. The third unit is for softening the shadows, a balance light. The very brief exposure, one thirty-thousandth of a second, produces well-timed sharp negatives from which can be produced rich black-and-white prints, excellent for gold-toning, and with any desired amount of diffusion. As a word of warning, though, I have found that negatives made with the speedlight require longer developing time than the products of conventional lighting equipment.

The mirror photograph, which I thought would be an interesting novelty for these pages was also made with this outfit, as the diagram indicates. Mirror photographs present certain complications, yet they can be very beautiful and very pleasing to the subject. They lend a sometimes needed variety to the work of any studio and are especially appropriate for portraits of youngsters, brides, and women with particularly pleasing or unusual hair arrangements.

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Lighting diagram for Mr. Israel's mirror portrait of a child

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Such pictures are most pleasing when the image in the mirror is in focus as well as the sitter and when care has been taken to eliminate distracting reflections. These are the complications to which I referred. The closer the subject is to the mirror the more easily that problem will be solved. The avoidance of reflections is chiefly a matter of light and camera placement—see the diagram.

I feel very strongly about this matter of aiming for constant variety, both in lighting and posing. People who are photographed often, such as children and women, want something different each time if the photographer is to retain their custom. So it behooves us not to be satisfied with any one style, whether it be a favorite lighting, a pose, or even a background. Yet this must not be carried to the other extreme of "jazzed-up" lightings, awkward or unpleasant poses, and distracting background arrangements.

Both of these portraits were made with an 11 $\frac{3}{4}$ " Voigtlander Heliar lens stopped to F 8 at the speedlight exposure of one thirty-thousandth second. They were taken on Ansco Superpan Portrait film, developed in Ansco 47 for twelve to fifteen minutes at 68°. The copyrighted portrait "I Want My Daddy" was taken against a white background. A six foot by eight foot light gray background was used for the mirror photograph, both to serve as background and to cut out unwanted reflections. The mirror, which is on a stand, can be raised or lowered as desired.

WILLIAM S. KALS
Vancouver, British Columbia



Lighting diagram for Kals' first portrait of a child.

My tongue was in my knee when I selected the subject of this young fellow for my lighting demonstration. I wanted to show that in child portraiture lighting is not the good dominant factor. Any photographer, professional or amateur, will minimize the blemish on light as the boy's right temple and the lack of sparkle in the hair. Yet most of us feel quite shocked when we secure an expression like this.

My first step when photographing a child is to arrange my lights so I may get some of a technically fair result. Then I forget all about lights and technique for the balance of the sitting and concentrate on getting expression. Take the lighting shown in the diagram. This is a fool-proof set-up although I nearly always use an additional spot at the subject's right ear. I should have used it in this case also.

Of course any similar lights will do as well as those indicated on the diagram. It is the placement that is important. The lights may be expensive affairs on studio stands or the most simple reflectors tied with baling-wire to music-stands or furniture. They may be built-in studio equipment such as some photographers have affixed to ceiling tracks, or light-weight stands designed for home portraiture. I emphasize that it is the basic set-up which remains unchanged.

With me this consists of three or at the most four lights. The main source is a $\frac{1}{4}$ A photoflood which I use either in a Victor goose-neck or a Beattie News Reel Floodline. An R-1 reflector-type lamp could be used with almost equal results. This main source I place on that side of the camera toward which the young sitter is turned. Another, weaker light over the same point on the opposite side lightens the shadows. A #1 photoflood would do as well as that shown in the diagram. The two spotlights are placed at the back and above the place I expect the young fellow's head to occupy. I say "expect" because all these lights are set up before the child enters the camera room. I use the word also because any child is apt to move around distressingly and will often move away from the ideal spot at the vital moment just as did the subject of my portrait.

A. HENRY KAUFFMAN
Philadelphia, Pennsylvania



Lighting diagram for Mr. Kauffman's portrait "Vanity"

THERE will probably be many readers of this book who are not professional photographers but making their livelihoods in other occupations or professions because in their younger days they were forced or led to disregard their artistic leanings. To them I offer my sympathy and my best wishes in their efforts to improve the camera work they are now compelled to follow purely as an avocation. I say this because I was fortunate in being able to pursue my own inclinations and, after all, if one is by nature artistic and wishes to make others happy by means of that talent, why not?

The world is a much better place to live in because of those professional photographers—and I know this includes every one represented in this book—who think more of registering on their negatives what is deep down in the hearts and souls of their sitters than of the income those negatives may represent. True success in portrait photography is only to be found along that path.

If a word of advice is in order, I would say to the photographer who wishes to advance in his chosen profession: use your imagination and dare to be different. Break away whenever you can—I qualify this because your sitter's wish should be your first consideration—from the customary head-and-shoulder portrait. I am not repeating here the frequently heard and read advice to make three-quarter poses or full-lengths, because I believe in going farther than that. An ordinary seated or standing pose, though different from the head-and-shoulder presentation which makes up perhaps 90 per cent of all portraiture, can still be every bit as uninteresting—and frequently is. Watch how people comport themselves in their customary activities; study your neighbors, the members of your own family; see how different their attitudes and expressions are from the so-called "studio" portrait. Then, when you have an appropriate subject before your camera, strive for a pose and expression that is truly "alive." Seek, in short, to obtain a "candid" effect without the hit-or-miss, amateur snapshot technique which mars so

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A. HENRY KAUFFMAN
Philadelphia, Pennsylvania



"Vanity"



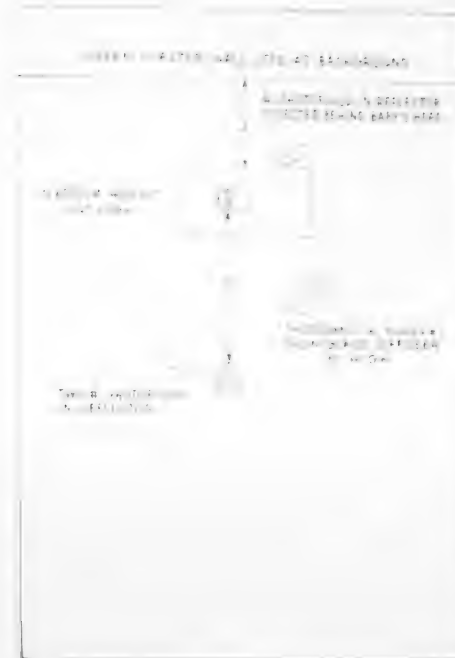
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Lighting diagram for Mr. Kauffman's portrait of a yawning baby

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many otherwise fine candid portraits. I offer my two illustrations as examples of what I have in mind.

The portrait of the young lady, which I quite naturally titled "Vanity," is a salon winner. It was taken with a Number 10A Century Studio camera (about level with the eyes to catch their whimsical expression) and an F 4.5 Zeiss Tessar lens in an Ilexpo shutter. The vanity table was an obvious prop, and I think the diagram sufficiently indicates the lighting arrangement. The exposure was one second at F/22 on a 5x7 Eastman Portrait panchromatic film, developed in DK-50 for ten minutes at 68°. The negative was projected with an auto-focus enlarger on Opal G, developed for sixty seconds in D-64 at 68°.

The other picture has also won several awards. As the diagram indicates, I prefer to use a platform when working with babies. The same camera, lens, and shutter were used for this though the camera was kept a bit low to shorten the baby's nose. The lens was stopped to F 8 and exposure was one twenty-fifth second, also on Eastman Portrait panchromatic film but developed in DK-50 for eight minutes at 69°. This was projected on Opal G, the print developed for fifty seconds at 68°. In projecting, it was necessary to shade the right side of the print to tone down the toy and part of the chair in order to concentrate attention on the face,



Lighting diagram for Mr. Kennedy's portrait in mirror.

It has long been, and will remain, my contention that much of present-day portraiture suffers from over-lighting and I offer this portrait as an example of a single source of light balanced with a mirror-reflector. Basically the lighting treatment duplicates that of a six-foot chandelier of thirty or forty years ago. The difference is that artificial light has replaced natural light from skylight and we can now move the light toward the center rather than move the eyes, nose and mouth in relation to the fixed skylight. I leave it to the reader if this portrait, made so simply, does not have all the attributes of roundness, protection from the back-sound, balance of light and shade, and skin texture that could be obtained by using anywhere up to fifty or a dozen lights.

My main source light, shown in the diagram, is a cabinet hung on a ceiling track, adjustable, of course, in all directions. It contains three U-shaped mercury vapor tubes, fifteen 150-watt Mazda lamps and five 17 photofloods, the whole diffused through frosted glass. The photofloods are only switched on by a "booster" when photographing children or making pictures requiring snap exposures. The mirror, which was responsible for all the illumination on the shadow side, is only 11 x 14 in. size and is mounted on a standard so it may be raised or lowered. The mirror itself is on a swivel and may be swung from side to side. This mirror-reflector has one chief advantage over a spotlight. The light it affords is of exactly the same actinic value as the main source, whether one is using the mercury vapor, incandescent or the two in combination, or even fluorescent light. This does not imply that I do not frequently use a spotlight in preference to the mirror. The lighting arrangement which I select in any case will vary with the subject and the effect I want to produce. Naturally, when complex lighting effects are wanted or indicated, I make them with as many lights as are necessary. Here I am merely illustrating a point which I consider important.

This portrait was made with an 8x10 camera and an old type 16 "Number 4 P. Rossport."

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Lighting diagram for Mr. Klintworth's two portraits

HAVING photographed this young mother many times, beginning when she herself was but a tiny baby, and having later photographed the baby's father shortly before he went overseas in World War II, I took more than ordinary interest in the sitting which resulted in these two portraits.

For the group I was determined to capture the evident adoration of the mother for her first-born while at the same time giving full prominence to the cherubic face of the child. I decided therefore upon a lighting combination which would produce moderate highlights and shadows on the baby's features while presenting the mother's face in a somewhat shadowed profile. Correct composition and expression would tie the two together and unify the group by the use of directional emphasis.

Here in Florida we are blessed with an abundance of actinic daylight and in our studio we do not fail to make use of it. These two portraits—the lighting arrangement and technical data are identical for each—are examples of what can be expected from the simple combination of good daylight with incandescent light. The skylight was the main source, the shadows being subdued by the ring light on the camera, although only six of the eleven 100-watt lamps in the ring were used for these two negatives. It is not necessary for me to describe the ring light because my partner Carl Blakeslee, M. Photog., has already done so in his own demonstration on earlier pages of this book. Both photographs were made with our standard Studio camera and 16" Goerz Celor lens, stopped to U.S./4. The exposures were one-tenth second on 5x7 Eastman Portrait panchromatic film, developed by inspection in diluted D-7.

C. VERNE KLINTWORTH, M. PHOTOG.

Tampa, Florida





Lighting diagram for Mr. Kossuth's portrait of an organist.

IN all the years I have been exhibiting pictures at photographic conventions, I have nearly always shown portraits of men. This has been true also of my many demonstrations and so a portrait of a man seems to be a natural selection for this book.

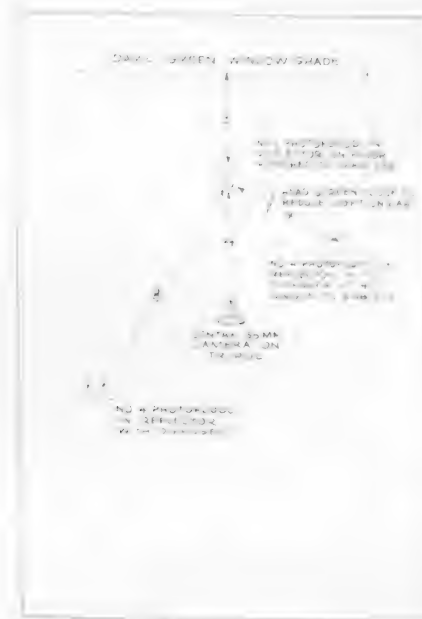
I have always preferred as subjects rugged men, preferably with brains. If I cannot always have the bright ones as sitters, I will take those who are not so bright, but at least I do want them to have character. Over the past twenty-five years I have photographed many of the world's great musicians, among them Stokowski, Reiner, Karl Muck, Kreisler, Heifetz, Rosenthal, Sousa, Antonio Scotti, John Charles Thomas. Musicians though they are, and consequently associated by most people with the less arduous side of life, all of them have preferred vigorous portraits to the smooth, slick variety of photograph. I believe most men feel that way.

I like to light my negatives so they will not need much retouching. The man in my illustration is a well-known organist and teacher from Chicago. I have presented him in about the same manner as the other musicians to whom I have referred, so this is a fair example of my style when I am confronted with such a subject.

To me the interesting thing about this portrait is the manner in which the light plays across the texture of the skin. It gives a peculiar quality that is entirely different from most lightings shining right on it, so to speak. This is what I call "vigorous" treatment of this type of subject—which may seem a bit effeminate when the more common soft style of lighting is used.

The side light came from a window. The front light, or general illumination, results from four 48" fluorescent tubes mounted in the ceiling behind the camera. At the right front, for a modeling light, I used a bank of six 30" fluorescent tubes. Although no reflector or balance light was employed, and the diagram certainly gives the impression of a very one-sided lighting, the portrait is perfectly balanced from every standpoint. The exposure was one-tenth second on Eastman Ortho X film.

MAURICE CARNES LACLAIRE
Grand Rapids, Michigan



Lighting diagram for Mr. LaClare's minicam portrait of J. Anthony Bill. M. Photog.

THIS photograph is of my good friend J. Anthony Bill, M. Photog. and elsewhere in these pages appears his own demonstration. The picture is a favorite of mine because it accomplishes just what I think should be the object of any real portrait. It presents the subject with simplicity and dignity, and displays his personality. I believe every photographer represented in this book knows Mr. Bill and will agree that this is an excellent likeness. It is at the same time a typical example of my work and methods because I made it during a demonstration at a meeting of the Professional Photographers' Society of Ohio at Cleveland, with the equipment I regularly use in the homes of my sitters.

To have at one's disposal a truly fine face to photograph is to my mind a great privilege; it is an opportunity that tests one's ability. The problem is to create on a flat surface the illusion of form, roundness, and depth of features. This the photographer accomplishes through his lighting, composition, and the point of view of his camera. Form and depth result from lighting the front of the head strongly, thus keeping the attention on the important features of the face while shading the ear to retain the effect of distance from the front of the head to the back. The feeling of roundness, or projection from the picture surface, is also necessary if the portrait is not to lack atmosphere with the subject appearing "pasted" on the background. A photoflood behind the subject, directed at the background, is all that is necessary for this purpose.

Note also how erectly, yet without stiffness or formality, the subject is placed in the picture space. Dignity in a portrait is attained as much by careful spacing on the ground glass as by the posture of the subject. I prefer to keep my lens about on a level with the nose of my sitter. This avoids the "chin in the shoulder" effect which is disturbing in so many portraits, especially of men. When a subject wears a light-colored suit, as in this case, it must be held down somewhat in tone to keep it in harmony with the rest of the picture.

Though there are always occasions when a studio camera is a necessity, I have over a

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Lighting diagram for Mr. Larssen's portrait of a child

ALTHOUGH I am in no sense a specialist in child photography I do feel that to the average professional it offers considerably more difficulty than the portrayal of adults. I have therefore selected this photograph for my demonstration because it represents what I consider to be a good portrait of a child. Many professionals prefer the "action" type of child picture to the more static and conventional photograph such as this. To me action is not essential in the depiction of personality, and I consider this just as true of youngsters as of their parents. It is the expression that is important, and my aim is to secure that expression without the necessity of intruding toys or other "props" into the picture. Appropriate though they may be in connection with children, they still detract from the child itself.

It goes without saying that to be successful with children a photographer must "understand" them. I quote the word because it is a cliché that is often used without any real appreciation of what it means: the ability to get down on their level and see things through their eyes without "talking down" to them. Children are wise beyond their years and readily detect the fraud who masks his dislike for the "chore" of picturing them behind a hard and glittering smile and a metallic laugh. No photographer who really likes children should have any difficulty photographing them once he has mastered the mechanics of his profession.

This is a simple one-source lighting, as the diagram indicates, with luminosity obtained on the shadow side of the face by means of an ordinary reflector covered with crinkled foil. The light, at a height of five feet, was tilted to illuminate the subject at a forty-five degree angle. This picture was made with a Number 9A 8x10 Century Studio camera, fitted with a 20" F 4.5 Goerz Dogmar lens in a Packard shutter. I gave it an instantaneous exposure at F 6.3 on 5x7 Eastman Super XX panchromatic film, which was processed in Hammer's no-stain developer. Development was complete in ten minutes at 65° in a three and a half gallon tank. The reproduction is from an 11x14 projection on Opal P, developed in D-52 and gold-toned in a

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JOHN LAVECCHA, HON. M. PHOTOG.

Chicago, Illinois



Lighting arrangement used by Mr. Lavecchia in producing the portrait opposite.



Portrait of subject actually before the camera with light from the reflector described in the adjacent photograph.

AS my contribution to a book which I regard as an important addition to the available study material on the subject of portrait lighting I wish to emphasize what can be accomplished with only one light and a reflector. The two portraits of the old gentleman were made in this manner. Unfortunately he was not available for a second sitting and, because I thought a photograph of the actual camera room set-up would be even more helpful than a diagram, I have duplicated the two lights with the help of another subject. I can be seen just in front of the camera making the exposures as I had an assistant photograph me while at work.

This is the type of demonstration I have presented at many conventions and smaller meetings and my audiences have almost invariably been astonished to see how many different effects can be obtained with just one light. For that matter, using only one light, nearly as much can be achieved by varying the pose of the subject without moving the light or the reflector at all. I have always felt that the use of too many lights is a mistake and only complicates matters.

My reflector is a full-length mirror used, for these two portraits, three feet from the shadow side of the subject. The light is a 1,000-watt daylight blue lamp in a parabolic reflector placed seven feet from the floor. In the camera-room photographs the corner of another light appears just behind the camera. Disregard that as it has nothing to do with the portraits and was merely slid into place to illuminate the camera for the camera room pictures. I always place my subject quite close to the background. Nothing could be simpler, yet there is no limit to the possibilities of such a lighting arrangement.

When photographing one or even two people with this single light method, I normally use a 1,500-watt blue lamp in the large Johnson reflector, placing that about seven feet from the subject and eight feet high, balancing it with a small reflector on the dark side. The lens is an F 4.5, used wide open, and the exposure is usually one second or better with a Packard shutter, depending on the speed of the emulsion and the size of the film. A small film requires

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JOHN LAVECCHA, HON. M. PHOTOG.
Chicago, Illinois



Lighting arrangement used by Mr. Lavecchia
to produce the portrait opposite.



Portrait of Mr. Lavecchia by Mr. Lavecchia, showing
the lighting arrangement used.

less time than an 8x10 or larger. I prefer orthochromatic emulsions and follow the manufacturers' formulae, developing usually six to eight minutes for a dark background or seven to nine when the ground is light.

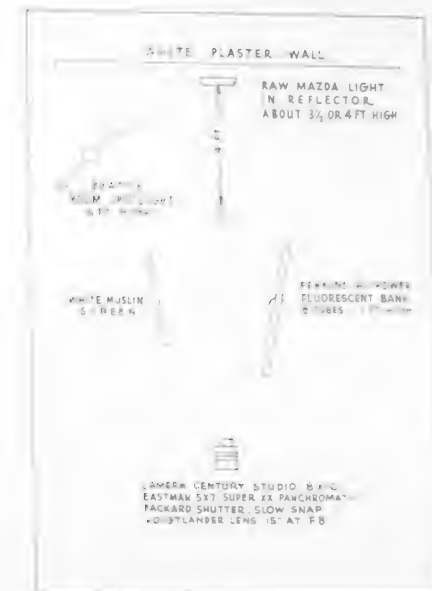


PHOTOGRAPHERS in the main believe, and rightly so, that the fundamentals of good portraiture are composition, lighting, technical quality, and character. Yet we differ in our interpretations of each and have stronger leanings toward some one of these fundamentals than toward others. Possibly we have a natural aptitude for that one or decided views about its importance. I have chosen for my demonstration this portrait of a boy and his dog because it helps to illustrate a viewpoint which I think of primary importance in the making of portraits. I refer to character, appeal, or expression, and I say this without wishing in any degree to minimize the value of the other three essentials.

I am not going to dwell on the lighting because it is relatively unimportant compared to the point I wish to make. This picture may not be remarkable from an artistic standpoint but I class it as my most successful portrait, if not my finest. I repeat, a successful portrait, because it was extremely satisfying to me in overcoming a difficult problem and also satisfying to the parents. A considerable part of my work is photographing children. As all photographers know, while children are not as self-conscious or as tense as adults, they have other characteristics which sometimes make the securing of a good portrait a problem. Overcoming these difficulties and getting pleasing results is not only very desirable but also very satisfying to one's ego, whether the pictures are of children or adults. Such a success gives picture-taking an added "kick," the joy of accomplishment regardless of handicaps.

Now to return to this portrait. Does the subject strike you as a boy who was antagonistic to having his picture taken? He was—and how! I won't go into the circumstances that caused his antagonism, other than to say that no one could be blamed. It was just one of those things. Still, I had to get a picture. How? Well, in this case, the breaks were with me because the boy had his dog with him and I was able to appeal to him through the dog. I finally told him that if he didn't want to have his picture taken it was O.K. with me. I turned my attention to the dog, patted him, played with him, told the boy he was lucky to have a dog like that, and a lot of other blamey. Then I suggested that I would like to take a picture of the dog, but how were we

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Lighting diagram for Mr. Leberman's portrait of Mr. J. Frank Dobie.

FOR my contribution to this book I have turned to my favorite type of person: a real honest-to-God man who lives his life as he wishes regardless of the people about him. I believe I have a true portrait here of J. Frank Dobie, an old Texas ranch-hand, who writes stories of the Southwest of yesterday and is now teaching Southwestern literature to the students in Oxford University, England. I rarely ever "pose" a subject so important and in fact Mr. Dobie did not know the picture was being made. His natural expression was the result of my listening to a story he had just written for publication in the *Saturday Evening Post*. Natural expressions are easy to obtain if you can get your subject to talk about the things in which he is most interested. It is a rule of mine never to tell a sitter to turn his head this way or that way. Instead, keeping him in conversation, I walk to the point where I wish him to look. The head then follows me naturally and there is no appearance of strain.

During many years spent studying art I have learned that the simpler you keep your composition, both as to lighting arrangement and background accessories, the more you increase the emphasis of what you are trying to convey in your portrait. I vary my lighting to bring out the best in every face. It is not the lighting or the lights, whether they are fluorescent, incandescent, or some other type, that makes the picture. It is whether or not you know the emulsion you are using, its red, green, blue, or blue-violet sensitivity; what it will do to—or rather, for—your subject with the lights you are using; your own ability to read light on the face; the exposure, and finally, the developer and your technique in using it. I am a firm believer in that old motto: "Get it in the negative."

For this portrait I used very few lights and a plain background, concentrating on a pleasing arrangement of line and mass composition. The main source was a Photogenic Hi-Power bank of eight 36" fluorescent tubes as high up as I could get them, about six feet from Mr. Dobie and at a right angle to his face. This light was tilted slightly downward toward him. On the left I

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Lighting diagram for Miss Lindquist's portrait by exposure

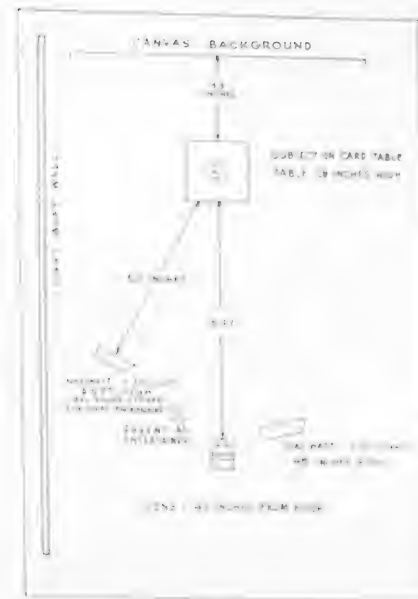
It has always been my practice, when submitting prints for salons and exhibitions, to select from my files negatives from which photographs have been made and sold. Since this demonstration is intended to represent my work I feel it even more necessary to follow the same tactic. What I present here is accordingly what I do every day.

Let me say first that I work rapidly. The moment is here and it never returns. It is necessary to make the exposure when the opportunity presents itself. Naturally it is essential to have the bulb in hand, ready at all times, and my dream therefore is a camera that can be always in focus so I may capture the many expressions I now lose due to the mechanics of present-day equipment. The better to facilitate speed, it is a rule of mine that lights, camera and materials must always be in readiness in the camera room so that when my subject steps in she immediately becomes the center of my attention.

My camera room is twenty-two feet by twenty-six feet and has light gray walls which make for even general illumination. Inasmuch as I have a grand piano in the room, it is only natural that I should make studies of musicians at the instrument. It is my practice when making such poses to have my subject play continually while I am arranging my lights and the camera. This gives me the opportunity to watch for angles that are spontaneous. I normally make such exposures at a tenth of a second. Watching for the moment when the hands are again in a position which has already appealed to me, I say "Hold it!" and simultaneously make my exposure. The result never has the frozen appearance of a deliberately pre-arranged pose. The subject automatically halts action without effort for the fraction of a second needed and the effect is most natural. The facial expressions are always interesting because it is impossible for anyone to maintain blank features while playing as the face evidences various emotions brought forth by the music.

My camera is a 10A Century Studio and the lens, an F. 4.5 Gundlach Radar, was three feet four inches from the floor. The lens was used wide open and the one-tenth second expo-

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Lighting diagram for Mrs. Lunde - portrait of baby

My chief aim in photographing babies and children—and that is the field in which I specialize, is "to get that expression." Children are far too active—and I like them to move and wiggle—to permit the use of too complicated a lighting arrangement and so I deliberately limit myself to a rather simple procedure. The two lights which I find quite sufficient are Sun Ray reflectors with flaps on all four sides. I find these flaps most helpful in controlling the light on both the subject and the background.

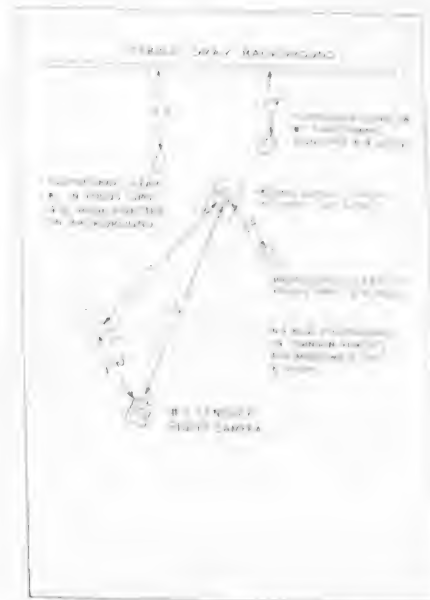
To me, half a child's expression lies in the eyes and naturally I consider that eye catchlights are essential. I have even no objection to the appearance of two catchlights in one eye. Technically, according to all the criticisms of this very point by eminent authorities, this is all wrong, but to me the catchlights are an addition to the appeal and brightness of a child's portrait and I never remove an occasional extra catchlight from a negative if in my opinion it helps the expression.

I differ with most child specialists on another point, that of allowing parents to remain in the camera room. Nine times out of ten a parent is my "entertainment committee," making faces, playing ball with the little sitter or piling books on her own or my head. I am happy to have the extra assistance which leaves me free to manipulate my equipment. Aside from this I prefer to have the parent present because it helps to give the child confidence. There are, of course, occasions where a child is shy or spoiled and then I have to assume control and ask the parent to leave. But whether the parent remains or not the important thing when photographing children is to work as rapidly as possible in order to complete the sitting before the novelty of being in the studio wears off or the child tires.

This portrait was taken in my former studio at Pine Orchard, Connecticut, where I had an oyster-white background made of tautly stretched sail-cloth or canvas. The camera was an R.B. Auto Graflex with a $10\frac{1}{2}$ " F 4.5 French Hermagis lens. This was stopped to F 5 for a one twenty-fifth second exposure on Eastman Super XX panchromatic film, which was developed in

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EDWARD L. MARTIN
Dayton, Ohio



Lighting diagram for Mr. Martin's "Quiet Glamour" portrait.

THE demand for glamor portraiture, aroused first by the desire of the average young girl or woman to look like a Hollywood star and quickened by the war when every G.I. wanted his sweetheart or sister photographed in "pin-up" style, has not lessened to any material extent. On the other hand, people are gradually returning to normal and, at least in my experience, are shying away from the more extreme effects of the war days. My selection for this demonstration, consequently, is a portrait which strikes a happy medium in that it is neither too glamorous nor too stereotyped. It is typical of what we are making today, a change of pace from the more striking poses and lightings at one time so much in demand. We call it "Quiet Glamour."

This lighting, especially suitable for such a subject, tends to emphasize the fine, strong construction of the head through a soft blending of highlights and shadows. The strong highlight on the top of the head was deliberately placed to counterbalance the large expanse of black in the dress. The soft play of light and shadow through the hair is in conformity with the lighting on the face.

For this photograph a Number 5 16 $\frac{1}{2}$ " focus Wollensak Vitax lens in an Illexpo shutter on a Century Number 7 camera, was used at one twenty-fifth second. The film was Eastman Super Panchro Press Type B, a split 5x7, and development was four and one-half minutes in DK-60a at 68°. The print is on Opal G, developed in DK-50a. With us, exposure and development time in printing are not standard, but vary depending on the tone desired in the finished print.

WILLARD C. MARTIN, M. PHOTOG.
Terre Haute, Indiana



Lighting diagram for Mr. Martin's portrait of a lieutenant

THE importance of this or any other portrait is what it does to the emotions of those for whom it was made. The end result we are trying to achieve is not a photograph but this emotional response. Let us examine the causes that work together and upon each other in order to create it. These causes or factors are, in order of their importance: the subject, the photographer's aim, his materials and equipment, as well as the way in which they are used.

A portrait is made for the small audience of those to whom the subject is important, and they are entitled to a portrait as true to the subject as possible. With the professional photographer the choice of his subject is entirely beyond his control except insofar as he may limit his practice to certain general types—men, women, or children, for example.

The one most important controllable factor, aside from the subject, that makes the most difference in the finished portrait, is the photographer's aim. Call it what you will: his idea, his message, his thesis; with any given subject the photographer's interpretation of that subject will depend upon his own basic philosophy.

I have selected for this demonstration the portrait of a serviceman. Because I believe that the primary purpose of a service portrait is to comfort and reassure the home folks, to convince them that the subject still retains his sense of humor, that he is equal to whatever comes and still supremely confident, I do not make—and did not during World War II—many of the grim, determined type of service portraits.

Of course I try to get at least one negative of every sitter that will satisfy him if he does not approve or appreciate my point of view, but my heart is not in it. To avoid misunderstanding, and with respect to this portrait in particular, let me say that a mere smile in a portrait is not enough. It has to be the natural expression of the individual's personality. I have never asked a subject to smile or to "look pleasant." Either the expression must be a spontaneous response to the emotional stimuli that I try to work into the conversation or we don't photograph it. The

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WINTON B. MEDLAR, M. PHOTOG.
Spencer, Iowa



Lighting diagram for M. Medlar's portrait of child.

HERE are two simple straightforward portraits of children which I have selected for this demonstration because it is this very factor of simplicity which seems to baffle many photographers. I see no necessity for a multiplicity of lights and equipment when results like these which will retain their appeal ten or even twenty years from now can be made with so little difficulty.

If I harp on simplicity I do so because it is a watchword in my camera room. I believe people react more naturally if the customary "operating room" feeling is absent. Then too the less equipment one uses the fewer motions one must make and the easier it becomes to secure and hold the subject's attention. Especially is this true with children.

So there are no backgrounds in my camera room. When, on occasion, some special effect is desirable or necessary, I secure it by using print-in grounds. My portraits are made against the light blue wall of the room and manipulation of the lights takes care of high key or low key grounds as desired. My lights, too, are reduced to essentials. I place my chief reliance on two Photogenic fluorescent banks, each of eight 30-watt tubes. I am thoroughly sold on this type of light though I believe many photographers use it too close to the subject in an attempt to get a directional effect from it. This, because fluorescent light is a soft light, is not practical. For that purpose incandescents in spots or reflectors are necessary. Fluorescent should be kept at a distance and treated like a skylight. It will then produce the desired sparkle and highlights.

The lighting diagram applies to both portraits. The light beside the camera was five feet from the floor to the bottom of the unit and the bank was not tilted. The other light was four feet from the floor and tilted toward the subject at a forty-five degree angle. Both photographs were taken with an 11x14 Century Studio camera about level with the sitter's shoulder. The lens was a Voigtlander Heliar stopped to F 8 and both were pin-shutter exposures on 5x7 Eastman

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WINTON B. MEDLAR, M. PHOTOG.

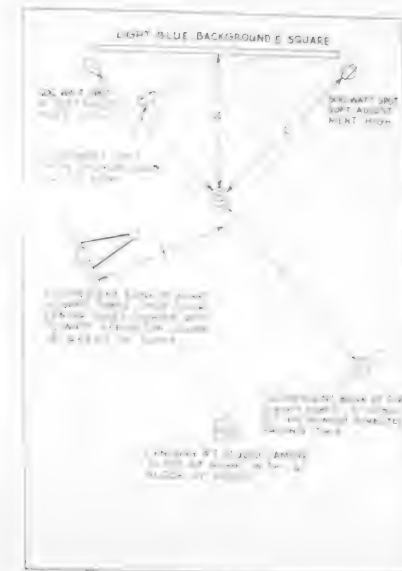
Spencer, Iowa



Super 8 color film, tank-developed in DK-60a for eight minutes at 65°. The reproductions are from the original prints made in 1965, though the delivered prints were on Opal G, selenium base.

JAMES R. METCALF, M. PHOTOG.

Harrisburg, Illinois



Lighting diagram for Mr. Metcalf's portrait of a high school girl

THIS portrait is a good example of professional "bread-and-butter" work being typical of our local high school annual photography. The tipping of the subject, which is of course the first thing to be criticized from a compositional standpoint, produces an effect that is highly popular with girls and younger women. This can be readily done with the enlarger but I prefer to get it in the negative by placing a small block of wood under the appropriate side of the camera stand. Thus I eliminate the possibility of making prints which are not all alike. (I learned this stunt from Paul Linwood Gittings, M. Photog., who omitted to mention it in his own demonstration on an earlier page of this book because he was working in a different style.)

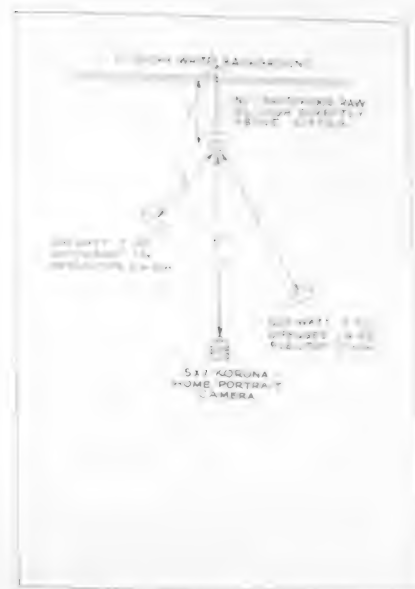
Important in my lightings is the 75-watt reflector-type lamp affixed to the larger bank of fluorescent tubes. This small lamp extends eighteen inches ahead of the tubes and always used raw, points up the highlights and produces necessary catchlights in the eyes in a manner difficult if not impossible to duplicate with the standard fluorescent light. Without it, an additional spotlight would be needed. It is a simple little gadget and consists of two goose-neck fixtures fastened to the top of the bank. The lamp is attached to these and, because they are flexible, is not rigidly fixed in one position. The background is medium blue which renders a nice dark tone when panchromatic film is used. The lighter effect behind the subject is of course produced with the spotlight shown in the diagram.

When I photograph a person with blond hair, as I want the color of the hair to be unmistakable in the resulting portrait, I use more light than I would ordinarily in order to keep the hair luminous and in a suitably high key.

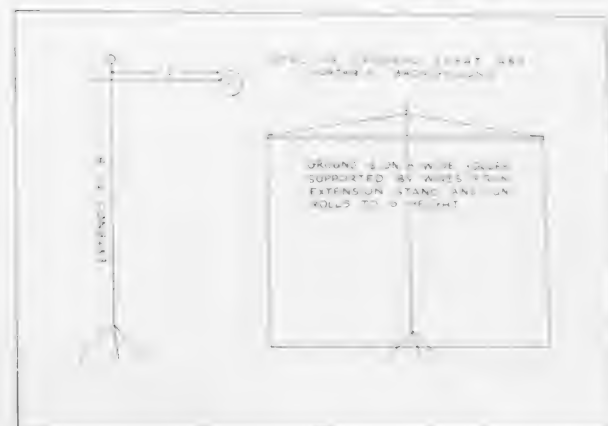
My Number 7 Century Studio camera has a special 4x5 Hoffman back. I much prefer 4x5 to working with a split 5x7. The exposure was one twenty-fifth second with a Packard pin-type shutter on 4x5 Eastman XX panchromatic film, tank developed in DK-60a for five minutes at 65°. The reproduction is from a projection on Kodabromide F-2, developed in D-72 at 70°.

LOUIS NEUNHOFER

Columbus, Ohio



Lighting diagram for Mr. Neunhofer's portrait of a child

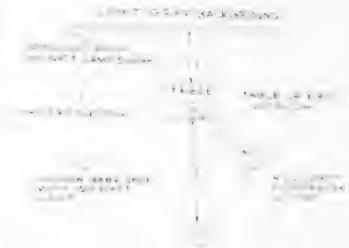


Details of Mr. Neunhofer's overhead light and portable background

BECAUSE I do home portrait work exclusively, my equipment carefully planned for the purpose as the result of years of experience, must be light in weight even though it must equal the performance of a standard studio outfit. Perhaps a detailed description will be helpful in addition to my accompanying sketches of the overhead light and the background and carrier.

Besides these, the outfit includes two Sun Ray reflectors, each carrying one 500-watt T-20 lamp, with side-shields and diffusing screens, on portable stands and a 5x7 Gundlach home

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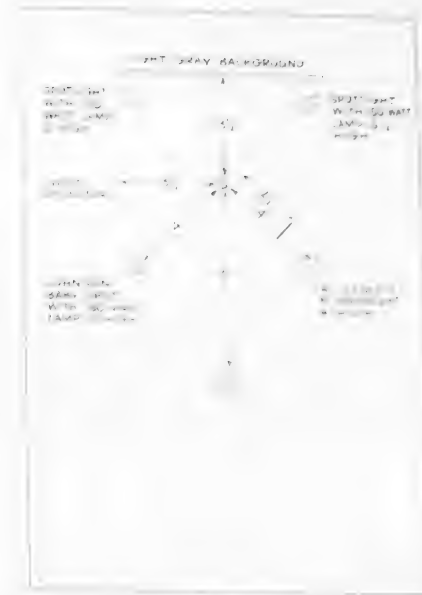
Lighting for portrait of Mr. Panfield's daughter, Sally.

MINE is a residence studio and for the encouragement of the photographer who finds his space limited, may I remark that even though my camera room is small and narrow compared to many, being only twelve by twenty feet, it is entirely adequate for my purposes and I do not feel myself cramped for lack of room. One reason for this may lie in the simplicity of my lightings which call for a limited amount of equipment and that not bulky in size. My main light is a fluorescent bank of only four 20-watt tubes and even that is frequently reduced in volume, when working with adults, by the interposition of a head screen between the light and the subject. For pick-up, balance, hair illumination and other purposes I have three spotlights in all. Two are standard and the other is a Johnson Baby spotlight. In all I use 150-watt G-E photo enlarging lamps. For background colors I prefer white or light gray as these give me an ample range for variation in the styles of my finished photographs, from vignettes and etching effects to the more formal border prints.

For portraits of children, as in my first illustration and its accompanying diagram, I bring my main source light in close and use it wide open for stronger light and faster exposure. I always use a light gray background when photographing children. As a rule, I have the mother assist in entertaining the youngster because I find children respond more readily to a familiar face. First I "visit" with the child outside the camera room, the receptionist having introduced Sally or Tommy to me in a grown-up manner. We talk about Santa Claus or the Easter Bunny or whatever the season or the mother may suggest. Not until we have become more or less good friends do we enter the camera room, which is fully lighted in advance. I have found that the sudden turning on of lights will frighten almost any child. The quicker the better is the rule with children's portraits because they tire so easily, and I usually make eight or ten exposures in fifteen or twenty minutes, stretching it sometimes to half an hour if the sitter is very tractable.

Mine is an 8x10 Century Studio camera, equipped with a 12 $\frac{1}{2}$ " F 4.5 Ilex Paragon lens.

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Lighting diagram for Mr. Panfield's portrait of a lady

in an Ilexpo shutter. The lens is at full opening most of the time. The portrait of this two-year old was an instantaneous exposure on a split 5x7 Eastman Ortho X film. It was tank-developed by inspection for twelve minutes in DK-60 at 68°, using twice the normal amount of water. The print is on Opal G, developed about two minutes in D-52, gold-toned in a Nelson bath.

When working with older subjects such as the young lady in my second illustration, I find this same broad type of lighting to be the most popular. As the second diagram indicates, the lighting is much the same except that the main source has been pulled a bit farther away and a head screen has been interposed, plus the addition of a third spot to illuminate the hair. This spot must be used cautiously as only a flare on the hair itself is needed or other parts of the picture will be over-illuminated. Such a lighting keeps my sitters looking gentle and young—and not too dramatic. I try to start them talking on some familiar subject and continue the conversation throughout the sitting, interpolating some silly comment now and then to provoke a smile.

This was taken, of course, with the same camera, lens, and opening, but with a bulb exposure on a full 5x7 Eastman SS orthochromatic film. Development was the same but for about ten minutes. All of my films are developed by inspection as sometimes my development may run as long as fifteen minutes, depending on the length of the exposure. Paper and development for this print, which also was gold-toned, were the same as for the other.

HOUSTIN PAYNE, M. PHOTOG.

Shawnee, Oklahoma



Lighting diagram for Mr. Payne's portrait of a college girl.

THERE are many methods of lighting an individual for the purpose of securing a successful portrait and each photographer, as his ability to read and appraise the effect of light grows with his experience, develops a style of his own. Regardless of the method or technique employed the final result from the standpoint of correct portraiture should be the same. In any good portrait the light will be so balanced that the effect is one of roundness and depth, combined with good composition and an expression conveying the character of the subject. This last requires the competent photographer to be more than an expert at composition and lighting; he must be a psychologist as well. I do not believe any photographer can be a real success if he lacks any one of those three attributes; if he has, or develops, all three I do not see how he can fail.

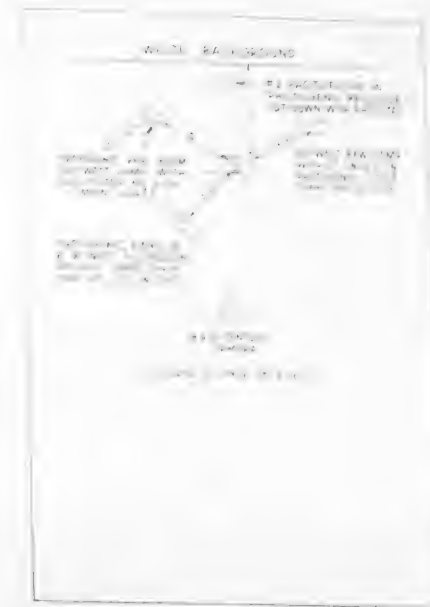
The accompanying portrait is of a young college girl. In making it I have tried to keep in mind the fundamental principles of lighting while portraying the vivacity and zest for life so characteristic of the young girls of America. For that reason, I have not tried in any way to make the picture glamorous. I always try to keep my lightings as simple as possible, using spots and other extra lights sparingly and only when they serve a definite purpose. For a subject of this type I like to use a light gray background and in this case the ground was of white cloth illuminated with a 200-watt lamp in a reflector placed on the floor behind the subject. When I do use spotlights it is nearly always to pick up and properly render the hair, and I watch them carefully to avoid over-illumination. However when my subject is a young girl I place them closer than I would with an older person, to bring out the full loveliness of the hair and add additional sparkle to the picture.

My main source light was a #4 photoflood in a Johnson Ventlite, diffused with tracing cloth and set at about a forty-five degree angle. My secondary light was identical with the main source, but placed lower and at a greater distance from the subject. Neither light was thrown directly on the young lady but each was turned slightly away—some photographers call

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F. J. PECHMAN, M. PHOTOG.

Kaukauna, Wisconsin



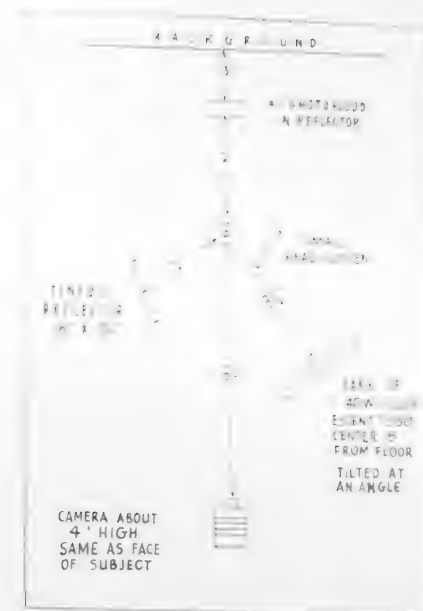
Lighting diagram for Mr. Pechman's portrait "My First Prom"

FOR a book such as this I think my accompanying portrait is quite appropriate. Ever since I opened my studio eight years ago I have had some student or other in the place under a training program for the Wisconsin State Rehabilitation Department and this portrait was made during a lighting demonstration for one such student. I was trying to impress upon him the importance of using a little imagination and taking a bit of time for preparation before making the exposure. Although all the various technical details that go into the making of a photograph do make a difference to the individual worker, the really important factor in making a fine portrait is an exacting attention to details before the bulb is squeezed. One has only to look at the average portrait photograph to realize that the subject was seated, posed, and the shutter snapped in the minimum of time.

I call this photograph "My First Prom" and there is a feeling of freshness about it which still makes it pleasing to me. I am not too old, so it may well be that the beauty of the young subject is what intrigues me; however I like to think that the lighting has something to do with it. Suppose we study it in detail. First, the shawl that the subject is wearing is her own but it was neatly pressed just before the picture was made. Second, the draping of the shawl establishes an unusually graceful pattern but this was neither luck nor good fortune. Each fold was carefully arranged with an eye to design and line, and then pinned to stay in place. Third, the girl was wearing a white blouse which would have made her shoulder, in the lower left corner of the picture, the highest light and destroyed the entire composition, so an old piece of lace was thrown over the shoulder to bring it down to correct tone relation. This piece of lace also created the illusion of a formal gown and, it being prom week, the title began suggesting itself. Finally an earring was added; cover it with your finger and see how it is needed to complete the composition.

All this extra attention required only a few minutes, but certainly represented the differ-

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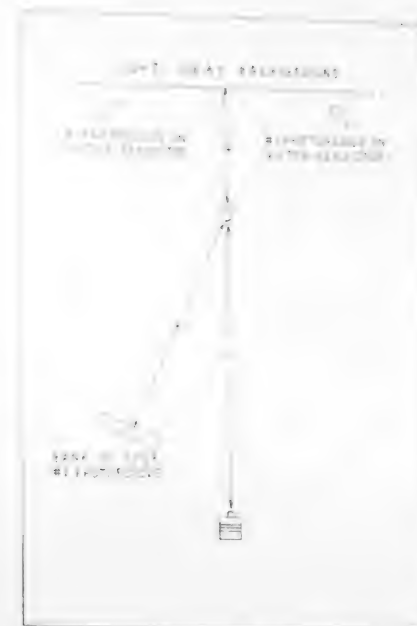
Lighting diagram for Mr. Peterson's portrait of Mrs. R. T. Kenedy

THE accompanying illustration is in my opinion neither outstanding nor unusual. I offer it as a good specimen of plain, direct portrait lighting. This, after all, is the easiest lighting to make yet it is terribly abused and, if I may use the term, "butchered" by many photographers. I have purposely selected it for my demonstration to show how simply it can be accomplished.

The older I become the less I think of fancy lightings and complicated methods of producing a portrait. I never did believe in having half a dozen lights scattered all over the camera room and glaring at the sitter from every angle. After all, if you can obtain a good lighting and produce a satisfactory portrait with one source of light, why involve yourself in all this extra work? With the one source and a reflector you have all you need. What's more, the resulting portrait will endure and will continue to please both you and the subject long after all the glamor, "Hollywood," and other so-called "modern" lightings and poses are gone and forgotten.

This is a portrait of one of our regular customers, Mrs. R. T. Kenedy of our city. I used a plain tan ground with a #1 photoflood in a reflector behind her to illuminate the ground and give relief to the figure. This might be considered a concession on my part to modern lighting methods. The diagram tells its own story but I want to emphasize that no photographer can produce a good portrait from any set formula or diagram. First he must be able to read light, then he must be certain in his own mind of the effect he proposes to secure; finally he must go about placing his lights, reflectors, and screens until he gets it.

This portrait was made with an old Darlot lens which I happened to pick up for twenty dollars. I don't know its speed and haven't bothered to find out because I am perfectly satisfied with the soft and pleasing effects that I get by using it wide open. The exposure was instantaneous with a Number 6 Packard pin-type shutter, on 5x7 Eastman SS Portrait orthochromatic film, developed by hand in a tray with Pyro-Pictol. The print is an 11x14 projection on Opal G from the negative cropped to 4x6. I used a soft developer for the print as the negative was just a little bit too contrasty for that emulsion.



Lighting diagram for Mr. Petty's outdoor portrait of a child

BECAUSE my work is almost entirely with babies and children our studio, run by Mrs. Petty and me, is planned throughout for especial appeal to the youngsters. Also it stands to reason that it is kept neat and attractive. This gives parents a feeling of confidence and at-homeness which is automatically transmitted to the small sitters. In the reception room, we have small chairs and tables as well as a play pen for those tots who would rather be on the floor than on their mothers' laps while waiting. And in the little room where we show our proofs we have a high chair where a mother can place her small child and concentrate on the business at hand.

Our fourteen foot by thirty foot camera room is at the rear of the studio, and here too all of the furnishings are for children, even to a bath table on which mothers can change or dress the tiniest babies. The walls of this room are painted in an off white, with a dado border featuring a "spring frolic" of children in bright colors. A notorious gadgeteer, I have designed a special baby holder for those not yet old enough to sit up by themselves. We keep an ample supply of toys on hand and also have a pair of live love birds in the camera room. I mention these things because the photographer who intends to specialize on children should plan his entire studio toward gaining their confidence the moment they enter, rather than letting them get the impression they are in for another of those dreaded visits to the doctor or dentist which in this day and age, modern children seem to have to undergo about once a month.

A large sign on the door of the camera room stops the doting grandmother and other relatives from entering, much as she or they would enjoy being in on the show. One exception we make, and most photographers will throw up their hands in horror at the mere idea, is to have two or three children and their mothers waiting and watching, right in the camera room until their turn comes. In fact, we make a party out of each sitting and above the door is a sign which reads: "This is going to be fun." When children can see for themselves just what it is all about, they lose all fear and enter into the spirit of things, while of course their mothers love to

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THE LATE L. DAVIS PHILLIPS, M. PHOTOG.
Winston-Salem, North Carolina



Lighting diagram for Mr. Phillips' portrait treated as a bas-relief in clay.

THE picture I have selected for my demonstration is less a portrait than a genre photograph. This is more in the nature of exhibit or salon portraiture and, through the use of a very low key of lighting, the result when viewed even fairly close up is almost that of a bas-relief in clay. One little trick of mine which helps in producing this very low scale of grays consists of diffusing my lights with cloths in light reds and blues instead of the customary tracing-cloth, cheese-cloth, unbleached muslin, gauze or even spun glass. All these, though they break up the light and relieve its harshness, fail to tone it down sufficiently for my purposes. In this portrait the light on the hands was still too high in key and I had to resort to local reduction.

An indirect Johnson Studio light, ten feet high and partially cut off by a head screen, was the main source. A spotlight somewhat to the rear was balanced by a reflector as the diagram indicates, but the diagram does not show a third light, a small G-E lamp in a reflector behind the sitter and directed at the background in order to provide the slight halo effect without which the drape around the head would have lost much of its charm.

My camera is a Number 8A 11x14 Century Studio, fitted with a 5A Dallmeyer lens which was stopped to F 8. The exposure was one second with a Packard shutter on 11x14 Eastman Ortho X film. This was developed in DK-60a and the reproduction is from a contact print on Azo P.



Lighting the bride for the portrait on the opposite page.

I COULD easily talk for a couple of hours, drawing many pages, about the technique of photographing brides but positive space is limited and I want to wind in more detail. Since this illustration here follows a greatly condensed explanation.

Most brides are photographed in a standing position. The reverse of a seated position is of great interest while the former is important in any bride's photograph. My first step is to have the bride seat herself comfortably, but not too deeply, on whatever article of furniture is selected, which I place about six feet from the background. As she takes her position I hold the train and hair of the gown so that the material is taut as she sits down, with the train starting its backward sweep from the waist. I then have her pull the foot nearer the camera back to a position directly under her head. This drops the knee and gets away from the square, boxy effect which spoils so many such portraits. Next, after arranging the folds of the skirt and train, I push the ends of the train toward her in order to get more highlights on them from my backlight and also to avoid the lifeless appearance of train when it is laid flat on a floor. Finally the veil and flowers are placed and planned to complete the composition.

Now for this portrait. Above the camera, at a height of ten feet, I have three 200-watt fluorescent tubes mounted in ceiling reflectors for my general illumination. Behind the camera I placed a Baby Keglite with a 750-watt lamp behind a White-lite filter, about eight feet high. This light was reduced to about a three-quarter spot and was directed at the subject from the knees up, in order to maintain some shadows in the folds of the train. At the bride's side are two Little Giant 200-watt spots. One, five feet high, throws its light from the side and back to highlight the bouquet and those folds of the train immediately in front of the camera. The other, eight feet high, highlights the shoulders and side of the head, as well as blima out the veil on that side. Both these spots are just out of range of the camera.

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Lighting diagram for Mr. Priddy's full-length portrait of a bride

FOR one reason or another the appointment to which I most look forward in any day's work is that which calls for portraying a bride. Perhaps it is because of the excellent subject matter that a formally dressed bride always provides for my camera, which is an inspiration in itself. Or it may be merely the pleasure which any normal individual experiences in looking at a lovely girl. Be that as it may, I have chosen to devote this demonstration to two such portraits because bridal photographs seem to be a serious problem to many photographers and one seldom reads much that is helpful about them in any book on lighting.

I sometimes wonder if many photographers do not go astray when they attempt bridal portraits for the simple reason that their subject matter is so attractive. They try to "gild the lily," so to speak. It is an unfortunate mistake to try to improve something that needs no improvement. A lovely bride requires, frankly, just to be photographed as she is. Be satisfied to portray her beauty; don't try to embellish it. It is an odd thing to me that the achievement of true simplicity in portraiture seems to be the highest hurdle for so many professionals.

Let us consider first the type of bridal picture most commonly seen, the full length. This calls first for an understanding of what the bride, and her parents who paid for it, really want: an accurate representation of her gown. The gown, in such pictures, is 90 per cent of the composition. It is our responsibility to portray it in a manner that will show what the designer had in mind, its lines, the quality of the material, how well it compliments the wearer.

When the train is long, steps help immeasurably. Platform and steps may be inexpensively built for studio use, though the home portraitist is not always fortunate in finding a suitable stairway at hand. In the lighting, the problem is to get enough light on the face without at the same time over-lighting the gown. This has been accomplished here by allowing no light to touch the front of the gown except that from the modeling light, which is ten feet away and about seven feet high. The face and flowers are lighted from the side by the Little Giant spot-

(continued on page 185)

LLOYD RUSSELL PRIDDY, M. PHOTOG.

Youngstown, Ohio



Lighting diagram for Mr. Priddy - newspaper close-up of a bride

and head and shoulders

light. True, this has thrown a dim shadow on the background but to my mind that adds interest to the composition. A touch of backlighting features the veil and accentuates the lines of the figure. This was taken at F 11 with a quick bulb exposure on 5x7 Triple S panchromatic film developed in DK-50 and printed on Opal G.

When a wedding is important and I know a picture will be wanted for the newspaper society pages, I always make at least one head-and-shoulder portrait and urge its selection for reproduction. In most cases, if the full length is submitted to the newspaper, the art department will cut it to head and shoulders anyway, and how the photographer suffers as a result! No full length is correctly lighted for use as a close-up but only another professional photographer will know that the sad result which appears in the paper when a full length is brutally trimmed was not the fault of the maker. The public can only judge by what they see and if the reproduction is not flattering to either the bride or her gown, what might have been excellent publicity for the photographer results in only a detrimental reaction. And so I repeat that I always make at least one pose of the bride for newspaper use. Nor is this, I might add, wasted effort from the financial angle because those proofs almost invariably appeal to the bride, if not the groom.

To secure adequate rendition of color in draperies and proper skin texture in head-and-shoulder portraits, I lean rather heavily on the use of direct raw light through the fresnel lenses with which most spotlights are equipped. Also I prefer panchromatic emulsions. The close-up shown here was taken at F 11 with an Ilexpo shutter instantaneous exposure—about one-fifteenth second. The negative is on 5x7 Triple S

LLOYD RUSSELL PRIDDY, M. PHOTOG.
Youngstown, Ohio



Lighting diagram for Mr. Priddy's newspaper close-up of a bride.

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MARTHA PYKE, M. PHOTOG.
Houston, Texas



Lighting diagram for Martha Pyke, M. Photog.

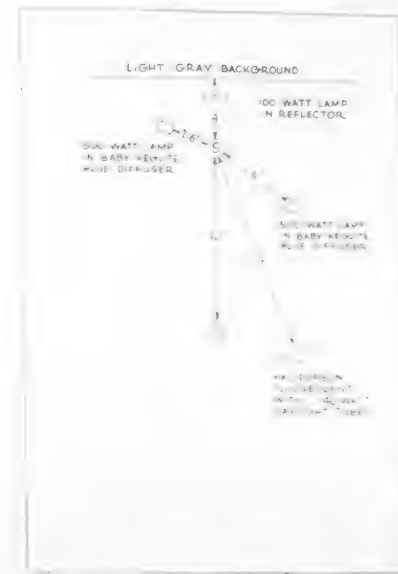
QUITE naturally, since I served as the cameraman in the Houston Studio of Paul Linwood Gittings, M. Photog., for almost three years, my methods closely parallel his own. Consequently I fully endorse the remarks in his own demonstration on earlier pages of this book concerning the importance of blue filters on artificial lights. Only in this way can incandescent lamps or spots be used with fluorescent light as the principal source, and the complete lighting be kept in balance. These blue filters are essential for soft keys of color as well as for keeping the subject comfortable and free from the glare of yellow light.

Here is the sort of portrait over which a young girl will enthuse. Many a reader will be shocked at the highlight on the hair beside the sitter's right eye and nose. Without apology, because the effect was attained deliberately, I might say that this was not so vivid on the original, which was a very warm pewter tone print. Some will say that this is a glamor portrait, or theatrical in style. Perhaps it is. I can only say that a year or more after making the portrait it still appeals to me and to others who see it.

The main source of light was the Beattie bank of 30" fluorescent tubes, at a height of six feet. Two #1 photofloods in reflectors were used close to the camera, one to throw a light on the vignetter and the subject; the other, on the opposite side of the camera, higher and also turned in slightly to "feather" the light, directed on the subject. A Beattie Boom-Lite at a height of seven feet served to illuminate the hair from above and, for balance, I placed a 500-watt auxiliary spot on the opposite side. Finally I added a small 150-watt spot for a pick-up light. The light from behind was, of course, turned away from the wall and directed toward the back of the sitter's hair. This accounts for the dark background.

The camera was an 8x10 Century Studio with an Eastman vignetter. For this portrait I used a 14" Pinkham & Smith lens with a Packard shutter. The exposure, at F 4, was instantaneous on 6x8 Eastman Portrait panchromatic film.

EUGENE L. RAY, M. PHOTOG.
Evanston, Illinois



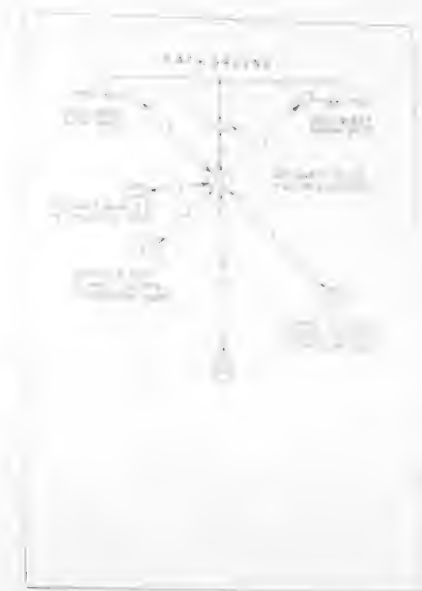
Lighting diagram for Mr. Ray's portrait of a young girl.

FAR be it from me to set off an argument of long standing among professional photographers but I, for one, must be classified with those who believe that for best results the contact print is the answer. For portraits larger than 8x10 I resort, quite naturally, to projection but for that and all smaller sizes it is my conviction that for quality of tone and proper rendition of detail the projected print must play second fiddle. For one thing the photographer who works by contact can never neglect his composition. He must know from the beginning what he intends to do because he cannot later correct his errors with the enlarger. Accordingly I work with an 11x14 Number 2 Eastman Studio camera, with backs for all sizes.

If I may add another bit of advice for the beginner in portraiture it would be to urge that he enter prints in as many photographic salons and exhibits as possible. Certainly that takes time which many a busy photographer can ill spare, but those hours may well be charged to self-improvement and it will prove one of the best investments he can make.

As the diagram indicates, my main source light is a Halldorson fluorescent stand light of seven 40-watt daylight tubes. For pick-up and balance I use two Baby Keglites, each containing a 500-watt lamp, keeping these within the actinic range of the fluorescent with blue diffusers. This portrait was made with a 22 $\frac{1}{2}$ " Wollensak Verito lens stopped to F 6 and the exposure was a half-second with a Packard shutter. The film was 5x7 Defender XF panchromatic, tank-developed in Elon-Metol for six minutes at 65°. The print used for the reproduction is on Azo #1.

LEE F. REDMAN, M. PHOTOG.
Detroit, Michigan



Lighting diagram for Mr. Redman's portrait of a young lady

MANY photographers—and professionals fall into this error as readily as amateurs—seem to think that the use of a spotlight anywhere in a lighting set-up will automatically produce a glamor portrait. This is far from being true. In reality the most dangerous and harmful thing that can be used in portrait lighting is a spotlight, if its use is not understood and if its inclusion is not for a definite purpose. A subject's hair, for example, is much darker than the face and it is asking too much of any photographic emulsion to render perfectly both dark hair and a comparatively white face. Herein lies the chief use of the spotlight—to give additional light to the hair. Thus, better values are obtained, as well as a very pleasing effect in the photograph though care must be taken to insure that the spot does not spill over onto the face and destroy the balance of light.

Another point of importance to every photographer is a thorough knowledge of composition. In that knowledge and its proper application lies the difference between the photograph which, though technically correct and properly lighted, is still ordinary and the one which is a thing of beauty. A photographer must know lighting and posing so well that he can accomplish his aims without effort, as easily and instinctively as he handles the controls of his automobile. This leaves him free to "visit" with his subject, and I know of no better way to break down a sitter's self-consciousness and put him at ease. Unless that is accomplished natural, pleasing expressions are unobtainable. Many photographers neglect social functions and other opportunities of meeting people on the ground that their studios keep them so busy they seldom have time or energy to get away. If they would change their habits in this respect it would help them to gain poise and assurance in their contacts with the general public. A self-conscious subject and an equally self-conscious photographer are an impossible combination if good portraiture is to result.

As the diagram for the portrait of the little girl shows, I customarily use little light in

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LEE F. REDMAN, M. PHOTOG.

Detroit, Michigan



Lighting diagram for Mr. Redman's portrait of the girl with her dog.

front of my subject, but a great deal in the back. This is done for a reason. By using balanced light sparingly in front, I secure softer shadows and eliminate much retouching. Of the three spots I have used for this portrait, the one at the sitter's right is especially important. This accentuates the modeling and makes unnecessary a head screen, for with this light I can control the modeling as I wish. This saves much time and has additional advantages in cases when it is necessary to correct or alter facial or other characteristics. It helps to give a nose a straighter or thinner appearance and is very helpful in portraying men with scanty hair or even bald heads.

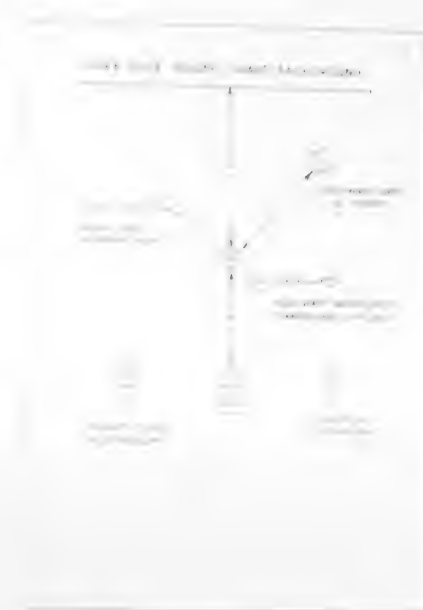
The little girl was seated on a posing bench of special design, higher than the customary chair, which adds to the effect of dignity. Absolute relaxation is essential in every portrait and I think it has been accomplished in this, aided particularly by the unaffected position of the hand. This was taken with a Steinheil Cassar anastigmat, stopped to F 6.3. The exposure was about a half second on Eastman Super XX panchromatic film. I prefer panchromatic materials because they do not have the "punch" of the orthochromatic. This makes it possible to secure a high key in some parts of a portrait and low key in others, giving a control of the lighting which I like.

Every photographer will agree that pictures of children with pets bring up special problems beyond the realm of photographic technique. They are less common, perhaps because of these additional complications, and I thought the inclusion of this might be helpful. Fortunately this dog is my own, so that he is not subject to the excitement and nervousness of the average dog when he is suddenly introduced to strong lights and a strange environment. When a dog is excited it is difficult to catch him with his mouth closed, and when that must be watched as well as the posing and lighting of a child, the situation is not an easy one. Children are seldom difficult to handle when with their own pets or with an animal of friendly disposition in which they

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THE LATE GUY N. REID

Fort Worth, Texas



Lighting diagram for Mr. Reid's "Hollywood style" portrait of a young lady.

THE tip-tilted, somewhat harshly-lit portraits first popularized by the Hollywood photographers of motion picture stars are now so much in vogue that at least one must be included in every set of proofs of a young girl. Consequently I am submitting one of these in addition to a more conservative portrait of a child. This demand for glamor is by no means limited to the younger generation, and the professional must therefore be prepared to meet it, regardless of his personal opinions concerning the artistic value—or lack of it—to be found in such photography.

In this instance my subject was placed about six feet in front of a dark blue roller-shade background. A 500-watt diffused spot, from a boom, was placed slightly in front of her and five feet above her head so that only the edge of the light beam was directed upon the frontal planes of her face. Another boom spot, two feet behind her and four feet above her head, was so placed as to outline the hair. Next came a third spot, 500 watts, also thrown on the hair from four feet behind her and to the right. The result of these three lights was to ring the hair with a soft light while balancing the planes of the face. Then an eight-tube fluorescent light was placed four feet in front and to one side of the subject and a smaller unit in a like position on the other side. These parallel the camera and just the edge of each light is turned into the shadows enough to give them transparency. Without these the shadows would be "inky" and would drop suddenly in contrast with no intermediate tones.

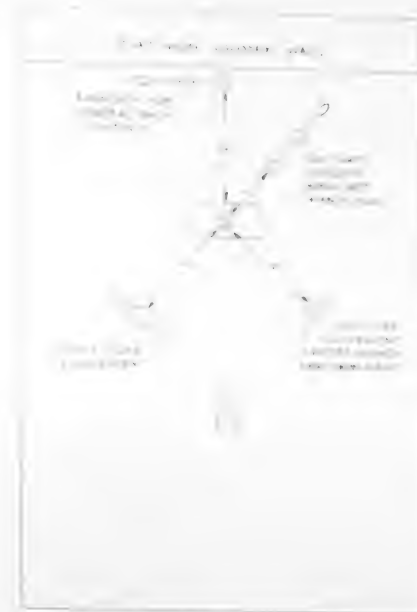
For this portrait I stopped my lens to F 6 and exposed for one twenty-fifth second on Eastman Super XX panchromatic film, which was developed in DK-60a for seven minutes at 65°.

The portrait of the child is an entirely different matter. When working with youngsters I find I can control them more readily by using a bench about three feet high. So long as the bench is solid the child does not mind the height, but its urge to roam around the room is

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THE LATE GUY N. REID

Fort Worth, Texas



Lighting diagram for Mr. Reid's portrait of a child

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curbed and the always present problem of keeping the subject within camera range is vastly simplified. I placed this bench four feet in front of a flat white Celotex wall, my preferred background for high key portraiture. For a main source I used the eight-tube fluorescent unit already mentioned. For this picture, it was set four feet to the left and two feet to the front, turned to throw the full value of the light on the child. The other fluorescent, used as a shadow or fill-in light, was put in almost the identical position on the other side and adjusted to produce a delicate shadow balance. The lighting arrangement was concluded with a 500-watt diffused boom spot placed two feet behind and four feet above the head. The combination makes a very fast light for children.

The exposure in this case was also one twenty-fifth second, though the lens was stopped to F/8. The material was also Eastman Super XX panchromatic film, developed in DK-60a, but in this case for only six minutes at 65°.



Lighting diagram for Mr. Rentschler's portrait of a young lady

HERE is a type of photograph which I am often called upon to make: a young lady with flowing hair who wants her hands included in her picture. Showing the hands, in my opinion, adds that extra interest which in many cases means the difference between an unusual portrait and one which might otherwise be commonplace. To appease the public demand for "something different" many a photographer takes the easy way out and adds an extra light or two. His result will be "different," yes, but it will no longer be good photography and I maintain that we can produce far more pleasing portraits by going to more trouble in the posing of our sitters while still retaining the fundamental principles of lighting.

I always try to have my subjects do most of the posing themselves. They are then more relaxed, both mentally and physically. Medical authorities will agree on this. Especially with hands, however, it is important to make certain that the pose the sitter assumed, no matter how characteristic, be satisfactory from the compositional standpoint. Take care to emphasize the sides of the hands, as in this case, and even when a pose requires showing the backs or palms, turn them obliquely toward the camera lest too much attention be drawn from the face. I prefer to let the sitters attempt several positions first and only when it becomes absolutely necessary do I myself set about the rearrangement of hands or fingers.

In this case I was fortunate. The young lady chose the position herself and her expression seems to bear out her genuine pleasure at the entire procedure. To give her extremely black hair form and detail I placed my larger fluorescent bank as indicated and the smaller one on the other side to soften the dark pockets on the face and neck, especially the shadows thrown there by the hands and arms. The third light, the Johnson Ventlite, was moved still more to the side and a bit closer for proper modeling of the face and hands.

The portrait was made with my 8x10 Eastman Studio camera, fitted with a 20" Wollensak lens with diaphragm shutter. The exposure was one twenty-fifth second at F 5.6 on a split 5x7

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WINIFRED SPAHR RITSCHER;
Pittsburgh, Pennsylvania



Lighting diagram for Miss Ritscher's portrait of a child

THERE is something beautiful in every face. The photographer, constantly studying human nature, observes the characteristics which make for personality. A portrait without personality is a mere reproduction of features and costume. I should say the fundamentals of a good portrait are the perfect relaxation of the subject before the camera and the ability of the photographer to capture the personality of the sitter.

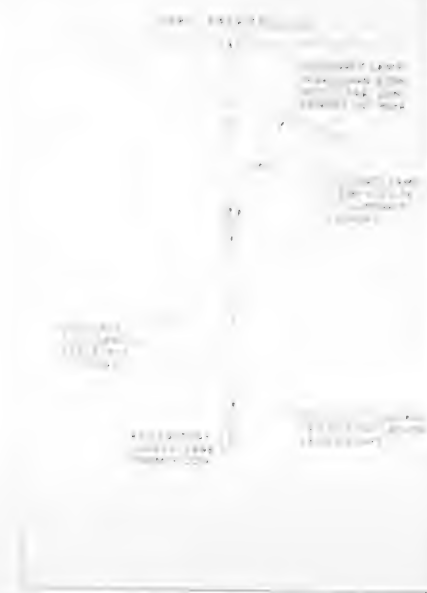
One is never so lovely as when forgetful of self. My first thought, therefore, is that my subject shall be at ease. The fact that my studio is in my home, with its natural home surroundings, is a valuable asset. When possible I meet my subject before the sitting. This gives me an opportunity to study individual mannerisms and features. It has been my experience that camera consciousness does not quickly give place to natural relaxation, so I always request an abundance of my sitter's time. While I am adjusting my lights, to accent the best features and minimize the poor ones, we have a pleasant social visit.

I use a variety of lightings, always with the thought of flattering while retaining an accurate likeness, so that my sitters may be delighted and posterity may know their ancestors at their best. While arranging my lights I move deliberately and placidly. During this process we have become quite well acquainted. I have learned the particular hobbies or general interests which fill the leisure hours of my subject and the camera has been forgotten. Exposure after exposure has been made while we chat, my subject entirely unconscious of what has taken place.

Occasionally I find men who are self-conscious and dislike even the thought of being photographed. But their innate interest in the mechanics of the problem soon absorbs their attention and, having found a common topic, we find ourselves chatting in a friendly manner. Men want to be regarded as interesting subjects and resent being rushed blindly and rapidly through a process whose result is frequently of vital importance to them.

Every photographer has his own method of securing that relaxation of his sitter which is so

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Lighting diagram for Mr. Roseborough's genre portrait of a soldier.

THIS is no doubt our most commented upon photograph but it is not strictly a portrait. It is an illustrative photograph which was made on assignment and really belongs in the class that old-timers in portraiture would term "genre" because it is intended to—and, I think, does—tell a story. We were asked by the *Toronto Globe and Mail*, when victory in World War II was imminent, to set down our impression of a Canadian soldier's feeling at the moment the "Cease Fire" order goes down the line and he knows that peace is a reality.

A hurried trip to a nearby barracks brought us back with a tin hat, old tunic, web equipment, and a veteran of the Italian campaign who looked like a suitable type. It soon became obvious that our good soldier was not, in addition, a similarly good actor. Five minutes of frenzied telephone calls located an airman of our acquaintance just discharged after service over Germany. He was well qualified to represent a Canadian serviceman, and as for his acting ability, the reader can judge for himself.

Make-up was liberally applied to both man and equipment. This consisted, so far as his hands and face were concerned, of a dark "Over-glo" base with splashes of Rubinstein Rico-Tan, supplemented with casein paint and a plentiful supply of grease from our "prop" room. Our model's naturally wavy hair was liberally soaked with water. While this was being done we selected a gray background and, to secure an effect of both dignity and distance, placed him when ready, a good twelve feet away from it, illuminating the ground with a Baby Keglite containing a 750-watt lamp. To give the model further height and stature we lowered the camera until the lens was only two and a half feet from the floor, and placed beside it, though slightly lower, a T-20 incandescent lamp, raw, in an etched aluminum reflector. Then, for the effect of strong light from the sky, we used a similar lamp and reflector at the left, fairly close and at a height of ten feet. For relief, and to accentuate the feeling of strong light from above, we added

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Lighting diagram for Mr. Schmidt's portrait of a man.

My lighting system is planned around two circular lights of my own construction, quite a few of which have been ordered from me by friends of mine in the profession, notably the late John Erickson, Hon. M. Photog., who mentions the light in some detail in his own demonstration in this book. It consists of twelve 15-watt eighteen inch daylight fluorescent tubes placed like the spokes of a wheel, each tube in an individual parabolic trough reflector, with one 150-watt diffused incandescent lamp in the center to act as a color corrector. The reflector is so constructed that the light is concentrated into one round beam, strongest at its center. In my studio one of these is used raw and the other behind a spun glass diffuser. This latter is used farther away from the sitter and at the camera, and the diffuser obviates any double highlight on the nose.

The raw light at the side of the subject, as shown in the diagram, was turned slightly away to permit the beam to pass in front of him. This simple turning of the light controls the amount of illumination on the face. The only other light used was the 250-watt spot thrown on the background to produce an effect of depth.

My camera stand, also illustrated, is of special construction and supports both a 5x7 Home Portrait Graflex and a standard 8x10 view camera. The shutters of both are electrically operated, for convenience and to insure accuracy of exposure. The sketch of my posing chair may also be of interest. This was made to order to my design and has an adjustable seat and armrest. This is very convenient when posing mothers with babies. It also solves the problem of holding the sitter's upper arm comfortably and yet high enough to afford a good compositional base for the portrait, as in the case of the illustration.

This portrait was made with the 8x10 camera, fitted with a 19" F. 4 Wollensak Varium lens in a Wollensak Studio shutter, stopped to F 6.5. The exposure was one-fifteenth second on 5x7 Eastman Ortho X film, which was tank-developed in Elon-Hydroquinone. The print is on Opal G projection paper, developed in D-52.

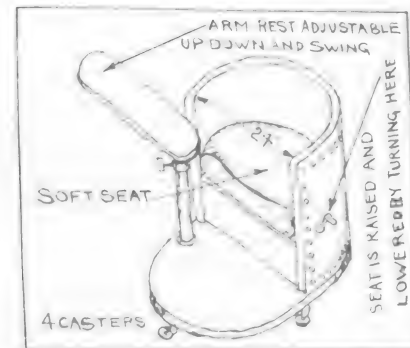
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ULRICH SCHMIDT, M. PHOTOG.
Saginaw, Michigan



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Mr. Schmidt's unorthodox, but highly serviceable, camera stand.



The design of the chair is by Mr. Schmidt.

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Lighting diagram for Mr. Shinn's outdoor portrait of a group of children

THE greater part of my work is done out-of-doors and I have decided upon this photograph because it answers the question most frequently asked of me when I appear on a convention platform: "What do you do when appointments are made for outdoor portraits and you run into a spell of cloudy days?" My answer to this is that I go ahead and make the photographs if the weather is at all reasonable. The photographer who wants to build a reputation for outdoor work must accustom himself to getting results whether the sun sees fit to put in an appearance or not.

I do not mean to imply by this that, except in some parts of the country, it is possible to work in the open air all the time. In our section we cannot count on more than two hundred satisfactory days a year. Also I want to emphasize that while the making of outdoor portraits may seem simple, it has many drawbacks. These include glare from too much sunlight, cloudy days, wind, insects, days which are too hot and others which are too cold. With all this outdoor work offers many compensations.

For this group I used a 5x7 view camera on a tripod, with a Series II 12 1/2" F 5.6 Cooke lens, the camera being at about eye level. The exposure was about one-fifth second at F 8 with a Packard shutter on Eastman Ortho X film, using the fastest bulb exposure but without the instantaneous pin. Because the day was cloudy, an instantaneous shot was out of the question but the picture was made with daylight only and without the use of reflectors.

Having selected a big evergreen hedge as a background, I moved my subjects away from it sufficiently to get a slight backlight on their hair. The result was a fully timed negative and development for six minutes in DK-60a at 68° produced full density.

MARY KOSSUTH SHUMATE
Alexandria, Virginia



Lighting diagram for Mrs. Shumate's home portrait of a baby

PORTRAITS of children are my specialty and I make nothing but home sittings because, to photograph well, a child must be rested and happy—and is more apt to be that way at home. Speed is one of the most important factors when working with children, and simplicity of equipment, combined with advance preparation, help to make for speed.

I always plan my arrival fifteen minutes before the appointed time, consult the mother, and then select that spot in the house or apartment which gets the most daylight. My equipment is then set up and the camera focused before the child is brought into the room.

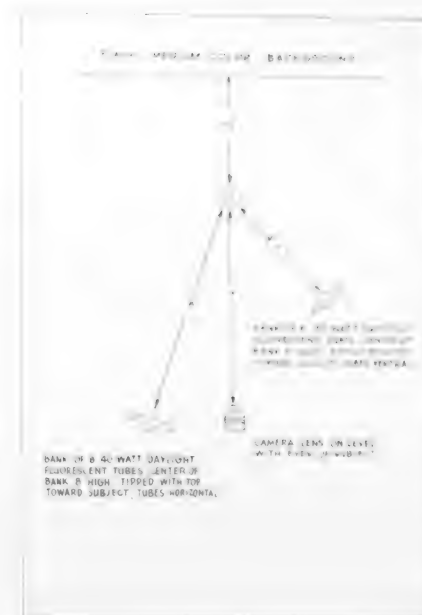
Children, good, bad, and any age, like a "show." As soon as you learn how to put on a continuous show from the moment you arrive until you leave—your battle is won.

In this case the baby, only two and a half months old, could not sit up alone. I propped her on a couch in the living room and just as I was ready to make my exposure a hazy sun shone through the window at the side of the couch, providing beautiful highlights in the picture.

The only other light used was a homemade fluorescent, nothing more than three ordinary kitchen units, each consisting of two 20-watt twenty-four inch tubes in a reflector, the whole mounted together in a shallow sheet-metal lined box. Too much cannot be said in praise of fluorescent lighting when working with children. It is cool light, soft enough so that even young babies can look directly into it and, important to the home portraitist, there is no danger of burning out fuses. This light was placed on an end-table about four feet from the baby. It is necessary, when using fluorescent light, to place the light source considerably closer to the subject than when working with incandescents.

This portrait was made with a 5x7 view camera. The lens is a 7 $\frac{1}{2}$ " F 4.5 Eastman anastigmat. It was used wide open and the exposure was with a Packard instantaneous shutter worked as fast as it can be made to open and close. The film was a split 5x7 Eastman Tri-X panchromatic, and was developed six minutes in D-72. The print for this reproduction is on Opal H, made with a ten second exposure, developed two minutes in a solution of half D-42 and half D-72.

THE LATE ALBERT E. SMELSER
Quincy, Illinois



Lighting diagram for Mr. Smelser's salon portrait of a child

HERE is a truly simple two-source illumination which produces the type of portrait for which our predecessors of the skylight days were so noted; I am sure all of us will admit that there were giants in photography in those days. Actually this arrangement is so simple that, leaving the lights and posing bench in position in the camera room, I can leave the studio and, in emergency, anyone on our staff can make a sitting.

Occasionally I find use for, and even enjoy experimenting with, spotlights, booms, and the rest but even when I do this my basic lighting remains and the others are added for the needed accent. To those who may feel that a photographer cannot sufficiently express himself pictorially by such simple means I submit this illustration. On the two occasions when I entered it in a Salon, it was accepted in each case and by one was termed "one of the outstanding prints of the exhibition." I use this lighting, or some minor variation of it, for practically every sitting I make. So long as I can secure results like this, why should I complicate matters by adding more lights when this enables me to concentrate on pose and expression?

This portrait was taken with my 8x10 Ansco Studio camera and a 12" Voigtlander Heliar lens. The exposure was one twenty-fifth second at F 4.5 with a Packard twin-bulb shutter on a split 5x7 Eastman Portrait panchromatic film, developed in DK-50 for four minutes at 65°. The reproduction is from a projection to 8x10 on Kodalure R, developed in D-52.

CHARLES F. SNOW, M. PHOTOG.
Boulder, Colorado



Lighting diagram for Mr. Snow's two portraits of men.

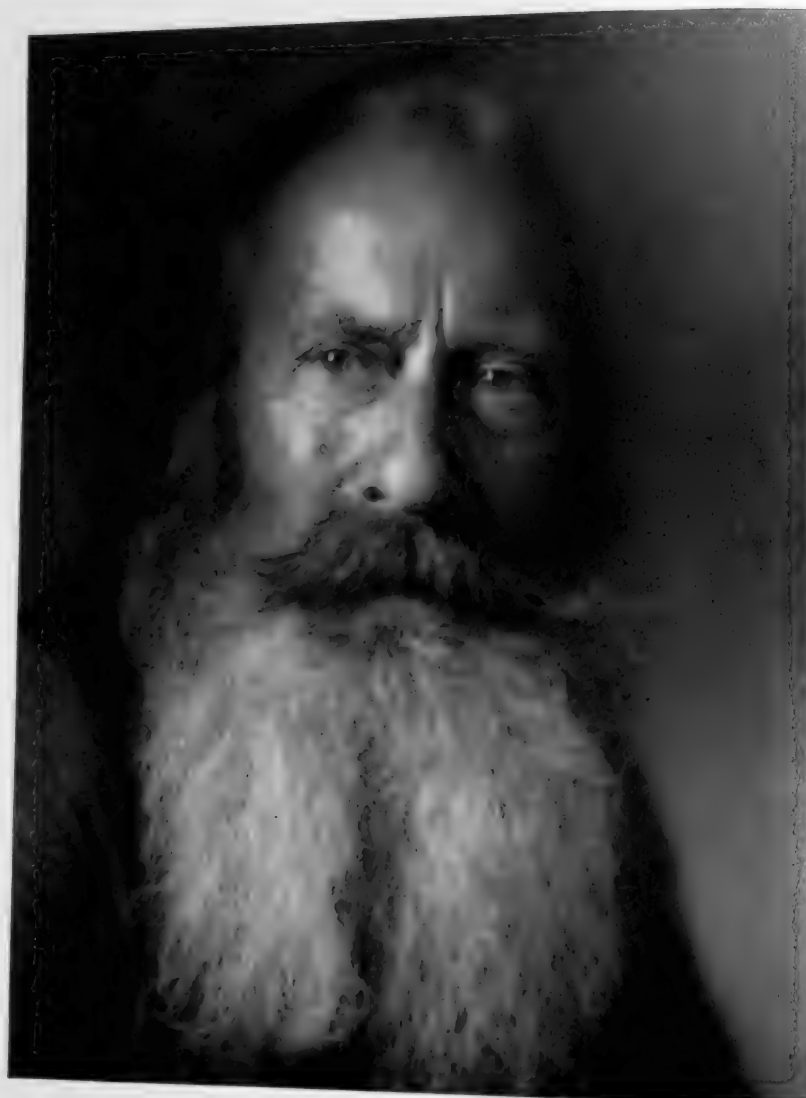
PO RTRAIT photography is never mastered; the perfect portrait will never be made. The photographer who is to succeed must be proficient in many things and able to fit these different elements into proper relationship with one another. The foundation of any portrait is the negative, which is a balanced combination of lighting, exposure, and development. The simplest way to arrive at proficiency in securing such a combination is to experiment by photographing a "gray wedge." This consists of a strip of paper shaded in intermediate tones of gray from black to white which, when photographed correctly, shows in the negative a definite line of demarcation between each two tones. Photography has its limitations which must be understood and appreciated. Even the best portrait emulsion can record only the middle register of the wide range of tones which can be discerned by the eye. Luckily for us, the emulsions and apparatus available more than match our own skill.

Chalky highlights and inky shadows result from ignorance of basic lighting principles especially that of balance, and the use of light too highly concentrated. We must keep in mind that a soft type of light, such as fluorescent, yields soft shadows, easily balanced by reflected light or a fill-in light of low intensity. The use of powerful incandescent lamps, undiffused or insufficiently screened, destroys that balance. When a subject is properly lighted, there will be a variation of tone in every part of the portrait, with detail in both the highlights and the shadows.

I use a fixed exposure of one twenty-fifth second for almost all of my portraiture and develop for thirteen minutes in Microdol at 70°. This leaves only one variable: the intensity of the light reflected from the subject's face. A very thin coating of face cream may be needed for pick-up lights on a powdered face or sallow complexion. On the contrary a touch of powder will quickly correct a face which is too shiny. These are mechanical features of portrait photography which should be so thoroughly mastered that they are accomplished with hardly a conscious effort.

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CHARLES F. SNOW, M. PHOTOG.
Boulder, Colorado



The photographic process itself is merely a tool, not as precise and finished as the tools of the human hand. Naturally the serious photographer must be familiar with the fundamental elements of art. There are two sorts of composition called composition, which are the result of the accumulated experience of many artists of centuries past. These must be followed if the correct pictorial language is to be obtained. In particular this emphasis is earned by eliminating nonessentials, which the camera can easily do because he commences with a blank canvas on which he delineates only what he deems so important. The photographer is faced with a ground glass covered with detail. What he chooses to eliminate is undoubtedly must be subdued through the proper placement of his lamp and through the use of soft-focus lens, when necessary, or even by pinning through feature surfaces in rough surfaces of paper.

Simplicity and naturalness are the foundations of art which in its truest sense is the use of good taste and common sense in the use of the elements of any picture so that they make sense. The photographer's point is to take. The Old Master lens has discovered that the best representation of a subject is produced by front lighting at an angle of forty-five degrees. This light, flowing across a face, yields the maximum projection of the features, each in its proper plane. By proper control of the light and correct focusing, the photographer imparts the feeling of the third dimension, thus rendering a truthful picture of the structure of the face. For instance, a front view, if properly lighted, will show the correct shape of the nose. This third-dimensional effect is an optical illusion based on the fact that bright spots seem to project while shadows seem to recede. While front lighting may flatter a subject, it also flattens the face and destroys all character. I use a Wollensak Verito soft-focus lens stopped to F. 6 because such a lens more nearly interprets a face as others see it, and when focused on the forefront of a face gives the illusion of the third dimension. The eye can select or discriminate; the sharp lens cannot.

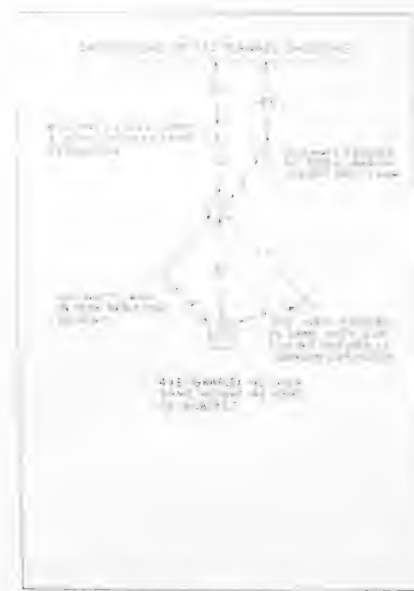
Still, it is the expression that is really important. The late Pirie MacDonald, Hon. M. Photog., always insisted that expression—or what he preferred to call character—is 90 per cent of a portrait. Good expression depends upon complete relaxation which produces naturalness. The exposure must be made when the subject is off guard. Our defense mechanism is such that we stiffen our muscles when we are self-conscious. That accounts for the "poker faces" which characterized the Daguerreotypes, Ambrotypes, ferrotypes and other early forms of photography which required long exposures. Many photographers combat this reflex action by bluntly asking the subject to smile. That sort of smile is artificial and therefore ugly. A true smile must be honest. It expresses itself principally through the eyes. Though you try ever so hard, you cannot compel your eyes to smile.

So it follows that no natural expression can be expected if the subject is on his guard conscious that a photograph is about to be taken. Are not expressions best in photographs of children who are never consciously on guard? Accordingly, much of our effort in the camera room must lie in the realm of psychology. How to throw the subject off guard; there lies our chief problem. Soft music and pleasant surroundings, an interesting discussion, perhaps a hot argument; all are tools of the photographer's trade. When the features relax, when the eyes light up, the face positively glows. Then do we have personality and when we record that in a fraction of a second, we have reached our goal; we have touched the heights that no other art can hope to equal.

Here are two portraits, both made with the lighting shown in the diagram and the lens and exposure I have already mentioned, on Eastman Super Panchro Press Type B film. One bank of fluorescent tubes is used as a directional light, falling across the face at an angle of about forty-five degrees, putting the shadow of the nose across the shadow of the cheek. It is this shadow of the nose that determines the correct angle of the light. When it is correctly drawn, you will find a three-sided patch of light just below the eye on the shadow side of the face. Automatically, the eyes will have the correct catchlights. The other fluorescent bank is used as a fill-in light

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JOHN S. STEELE
Toronto, Ontario



Lighting diagram for Mr. Steele's portrait (p. 220)

I HAVE the feeling that a picture should speak for itself and anything written about it is usually redundant. So perhaps it will be sufficient if I explain what I don't like about this portrait and the reason why I submit it as an example of my work in spite of that fault. Had the negative been sharper, the skin quality would have been better. The expression was so natural, however, that I thought it compensated for this lack of quality. To me two things are essential to a good portrait, technical quality and the sensation upon looking at it that here is a real person. When someone looks at a group of my portraits and says they all look like real people then I feel I am doing my job successfully. Because I have come close to my objective in this one I present it as typical of my best work up to the beginning of 1947. I reserve the right to start disliking it at any time my standards of quality and interpretation improve.

I never place my subject before the camera until we have chatted about this, that, and the other for a few minutes and, if what we have been talking about really interests me, will often miss a good shot rather than interrupt the sitter's flow of conversation. My sittings run between one and two hours each and neither my lighting nor psychological technique follow any standard pattern. During that time I will make two dozen or more exposures. I freely admit being guilty of the charge I have read somewhere that many photographers make a lot of exposures because they are not sure what they are going to get. If I were sure, I would quit. To me the fun lies in hoping that some day I will secure a portrait which I will continue to like for more than a few brief weeks. The point is that in each sitting I am trying for something that is an honest portrayal of the subject. Regardless of what others say, I do not believe this can be done hurriedly or in one or two attempts. True, my unorthodox and irregular procedure often results in a miss but on the occasions when it does click, I have something unusual enough to warrant the trouble. I detest mediocrity.

The lighting diagram is self-explanatory, and covers everything except that my studio

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Portrait of a child

Portrait of a child

Portrait of a child

AS we photograph a great many children I thought this portrait would be a good example of the type of work done in our studio, especially as this arrangement of lights, simple but effective, has become almost standard with me when working with youngsters. My first rule, because children are so easily startled, is to have all the lights on in my camera room and everything as nearly in place as possible, before the child enters.

Except when a child is very young I prefer to work with it alone. When my sitter is a baby or in the toddling stage, the mother's presence is necessary, but only to calm the child and not to assist in obtaining expressions. In that case my receptionist instructs the mother to go in with the child, but to keep quiet, avoid showing nervousness, and especially to refrain from giving orders to the child. The mother is also told that as soon as the child has made friends with me she is to leave the room quietly.

At first I ignore the small sitter and make no attempt to force myself on his attention. I find that if you keep your distance, a child will almost always make the first approach and from there on things are easy. Of course I have an ample supply of toys, which are kept in a cabinet. These I bring out one at a time, putting each away until I find one which arouses real interest. Then, with the others out of sight, we can concentrate on that.

Expression is all-important with children and so that I may devote myself to it almost exclusively, I keep my equipment as simple as possible. The diagram shows my two lights, plus a small one to illuminate the background. The camera is a 5x7 Ansco Home Portrait, fitted with an F 4.5 9 $\frac{1}{2}$ " Bausch & Lomb Tessar and a Packard pin-type shutter. With this outfit, at full aperture, I take instantaneous exposures on Eastman Panchro Press Type B film. I use no screens or reflectors when photographing children and seldom use spotlights.

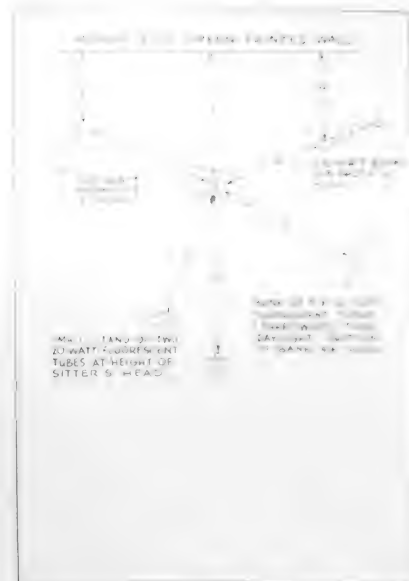
For adults I bring into play my 8x10 Century Studio outfit, with a 16" Bausch & Lomb Sigmar lens for average portraiture and a 6D 20" Dallmeyer lens when I want to make larger

RAY STOKER, M. PHOTOG.
Fairmont, West Virginia



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"Margaret"



Lighting diagram for Mr. Stoker's portrait of Margaret

HERE are two portraits which graphically illustrate how tremendously the result of almost identical lighting may be altered by a different pose of the subject. To the professional photographer it is immediately obvious, without a diagram, that the main source light for each was at the right, the supplementary or fill-in light at the left, and that two spotlights were used to illuminate the hair. The layman might well imagine that considerable rearrangement had been necessary, yet here we see how simple it is to emphasize either side of a sitter's face or secure a considerable variety of poses with no material change in the basic lighting set-up.

This basic arrangement will not necessarily be the same with every photographer but when it has been decided upon, as a result of experiment or experience, one's work in the camera room becomes greatly simplified and the sitter, impressed by the photographer's evident knowledge of what he is about, settles down with a feeling of confidence. That has always been my aim: to keep both my poses and lightings as easy and simple as possible so that I can devote my attention to securing that important combination of likeness and expression. By expression I do not mean a grin, a smile or a laugh, as these pictures indicate. There are occasions when such muscular distortions of the features are desirable but not, from my viewpoint of why people want photographs of themselves, in the normal portraiture of the average subject.

Both of these were taken with my 8x10 Studio Camera and 14 $\frac{1}{2}$ " F 4.5 Voigtlander Heliar lens, which was stopped to F. 9. The exposure in each case was a very quick bulb using a Packard shutter. The portrait "Margaret" was taken on Eastman Tri-X panchromatic film while for "Wanda" I used Ansco Super Press panchromatic, both being split 5x7's. Both were tank-developed in DK-60a for about nine minutes at 68°. Our finished photographs are usually made on Opal G, but these reproductions are from glossy prints on Kodabromide F-2, developed in Selectol. I prefer Selectol for glossies, having found that by timing them to develop in two minutes I attain that blue-black tone so much preferred by engravers.

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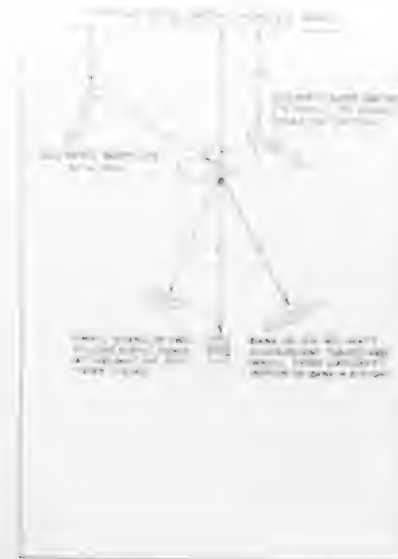
RAY STOKER, M. PHOTOG.

Fairmont, West Virginia



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"Wanda"



Lighting diagram for Mr. Stoker's portrait of "Wanda"

If I may add a word or two of advice I would say first that when working with spotlights behind the sitter, and consequently facing the camera, the utmost care must be taken that no stray light reaches the lens. If it does, the snap and sparkle of the portrait will be lost and to that slight element often lies the difference between a good photograph and one that is *excellent*. Second, in printing, I find that nearly every print can be improved with a little *burning-in*, especially in the corners.

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WILL H. TOWLES, M. PHOTOG.
Washington, District of Columbia



Lighting diagram for Mr. Towles' portrait of a young lady

FOR years at conventions and meetings, and in my writings, I have urged photographers to raise their work above the commonplace by making more three-quarter and full-length poses and so it is only natural that I should select a three-quarter position for my contribution to this book. Given a picture space, obviously it is much easier to fill it with a head-and-shoulders but the photographer who really wants to progress should not allow himself to establish the habit of always adopting the easiest way. Assuming then, that we are going to make a three-quarter portrait, there are two things to keep in mind: our space must be filled in an interesting manner; the composition should also be kept simple in its arrangement.

For this portrait of a young lady I selected a medium gray background and placed her about four to five feet away from it in order to obtain a feeling of atmosphere and relief. Two fluorescent lights were used. A bank of six tubes was placed to the right of the subject, about eight feet away, and raised to its limit. It has been my experience that when fluorescent lights are used too low or too close to the subject, all planes are flattened out and the result is a very weak portrait. The second light, of five tubes, was placed about the same distance from the subject and slightly to the left. This served as a balance light and also added some needed volume of illumination. No screens were used. To control and subdue the light on the lower portion of the figure, the six-tube light was tilted slightly toward the ceiling.

The lens was a $6\frac{1}{2} \times 8\frac{1}{2}$ Voigtlander Heliar, stopped to F 5, and I used a quick bulb exposure. The negative is on regular—not the fast—5x7 orthochromatic film and was developed in a Glycin borax solution. The reproduction is from a projection print on 8x10 contact paper. This, in my opinion, has a longer scale of tone values and therefore the rendition is more satisfactory.

ALVA C. TOWNSEND, M. PHOTOG.
Lincoln, Nebraska



Mr. Townsend's camera room
arrangement for his accompanying group



Lighting diagram for Mr. Townsend's
group of mother and daughter

WHEN demonstrations are presented at conventions or for educational purposes, as in the case of this book, I do not favor the use of paid or experienced models. It is their business to co-operate with the photographer and consequently an entirely false impression of his ability and methods is the result. Naturally, then, in choosing this group of two I have not selected any special models but have rather tried to present an actual example of the normal work of my studio. I have also supplemented the lighting diagram with a small photograph of the camera room arrangement.

I am among the few who still prefer daylight, although of course I have added artificial light and use it to meet the modern trend, when necessary, of simplifying special lightings by obtaining them with spots or modeling lights rather than with the more complicated use of mirrors and reflectors. We have here an example of how a spot may be very handily used to supplement daylight.

In making this group, my single slant skylight was the main source, a large reflector being used to illuminate the shadow side. The small picture illustrates the use of this reflector better than any amount of explanation and shows how frequently a diagram fails to tell the complete story. The only other light was a boom spot, shooting over the background, to illuminate the hair. The picture also shows my very handy small platform, only six inches high and on casters so it may readily be moved. Often a minor adjustment of the platform obviates moving reflector and lights or the subject with perhaps the total loss of a carefully thought out pose.

My camera is an 11x14 Century Studio with a 16" 3A Dallmeyer and a Packard shutter. The lens was stopped to F 5.6 and the exposure was a slow bulb, approximately two seconds on 8x10 Defender XF orthochromatic film. This was developed in A.B.C. Pyro for six minutes at 70°. The print, exposed for four seconds, is on Azo G-1 and was developed two and a half minutes in D-52 at 70°.



Lighting diagram for M. Townsend's portrait of poet V. E. Southworth.

LET me preface my remarks by saying that it is hard to find a portrait which has no fault. Although we make thousands of photographs which look good to us, but when we make a real effort to select one which seems even fit to criticize, all of them present such glaring defects that we feel like giving up entirely. After all, we practise photography the same way a physician practices medicine. He diagnoses his patient to the best of his ability. We—and often with far less time at our disposal—attempt to analyze our subject. The physician decides upon one method of treatment; so do we. And then, if it doesn't work, we try another. I have been in this profession for fifty-five years and consider that I am still learning, so my advice to the younger generation is to keep trying and not become discouraged.

This portrait is a "line" lighting, sometimes called a "Rembrandt" lighting. The subject is a poet, V. E. Southworth, and this appealed to me as the best presentation of what I consider a distinguished profile. Yet this is far from being a prize-winner; instead, I would term it a good "bread-and-butter" portrait, retaining likeness while indicating the kindly character of the man.

As the diagram shows, I have two fluorescent ceiling banks, about nine feet from the floor, each containing three 36" tubes in homemade reflectors. These serve as my main or flood light. In addition I use a Johnson Ventlite in which I have six daylight fluorescent tubes. This, a stand light, can be moved around as desired and gives me closer pick-up lights. For a line lighting like this I use it behind my subject and not too high because it will throw too strong a light on the top of the head even though it may be at a forty-five degree angle. The correct elevation can only be learned through practice. So placed, a little of the light filters over on the shadow side, lifting the subject's left cheekbone and giving form to that side of the face.

I made this with an old-fashioned Number 7 Voigtlander fitted with an iris diaphragm shutter, using Eastman Portrait panchromatic film. I no longer remember the aperture because I pay little attention to such technical details. Any lens may be used and the diaphragm selected as you like. Here again experience must be your guide. The time will come when you will

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CLIFTON L. VOSS, M. PHOTOG.

Fargo, North Dakota



Lighting diagram by M. Voss, showing a stand light.

AS one of the pioneers of and perhaps the first American professional photographer to use fluorescent lighting in portraiture I am as sold on it today as I was when I made my original experiments. Except for background lighting and spots I use it exclusively and yet I could not work with it successfully were it not for a modeling light of my own design and of which I have made only the one for my own use. I think it warrants a detailed description.

This light consists of three vertical 30-watt fluorescent tubes so mounted in concentration reflectors—on a movable stand, of course—that they focus in a concentrated vertical bar of light. At a distance of three feet, this bar of light is just eight inches wide and it drops off very rapidly at the sides. This permits its use as a modeling light on the features of strong vertical features as wanted while the dropping off at the sides keeps the ear in shadow without the necessity of using a head screen. Similarly, raising the light causes it to drop off at the top and eliminates the head screen when photographing bald-headed men. The concentration is sufficiently strong to carry across a group of several persons while maintaining the same intensity of light on all in the group. Without this light I could not secure the roundness which I consider essential in my negatives. I might add that I am a firm believer in so lighting my subject that full development can be used in order to bring out everything that is in the negative.

For this portrait I used a Wollensak Verito lens stopped in F 8.5. The exposure was probably one-twentieth second; it was made with a Packard pin-type shutter which I have speeded up as much as possible. The negative was on Eastman Super Panchro Fries Type B, a split 5x7, and it was tank-developed for fourteen minutes at 68° in DK 50 used at half strength—we dilute the normal three and a half gallon formula to make seven gallons.

NAN WALLACE, M PHOTOG

Santa Barbara, California



Extrinsic drawing by Miss Wallace's camera showing use of drape and hair ornament

I HAD two reasons for selecting this portrait as the subject for my demonstration. First, subjects like this who have truly black hair are not easy to light. Second, I used to discuss the possibilities of drapes and suitable hair ornaments. Some photographers who speak to me advise use draped to the point where they become monotonous. It is my belief that a drap should only be resorted to when it will decidedly improve a neck line or disguise a neck which would otherwise detract from the portrait. I vary the neck line in accordance with the features of the sitter, using a V for round, full faces and a round or square effect, whichever may be more suitable, when a face is long and thin. Depending upon the effect I have in mind, I vary the drap, merge into the background, quite without detail as in this case, so they tend to be lost out folds in the material. I vary the hair ornament to suit the type of subject, using flowers, feathers, and both large and small bows of velvet ribbon, or even butterflies made of paper which incidentally photograph beautifully.

The background for this portrait was black chambray, about five feet behind the subject and the drap was black velvet. The picture was taken in my former studio in Toledo, Ohio, where I had a large north window, about ten feet square, for general illumination. The light was supplemented with a Photogenic Hi Power fluorescent bank of six 36" tubes placed in front of the subject and to the right of the camera, seven feet from the subject and seven and a half feet high. Four feet from the sitter's head and five and a half feet high, I placed a Photogenic Sun-Spot. Attached to the background at a height of eight feet was a #1 photoflood in a small reflector for added overhead light and to give luminosity to the hair. When photographing blonds in a similar pose, I use a #4 photoflood in this reflector. In either event the result is admittedly an extreme lighting, though not quite what the younger photographers today call glamor.

My camera is a Number 1 8x10 Century Studio with a 5x7 back. It was placed about seven feet from the sitter and because she wanted her nose lengthened in the picture, I kept

J. FRANCIS WESTHOFF

Columbia, Missouri



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Lighting diagram for Mr. Westhoff's portrait of a college student

THE production of good photography—and this is as true of landscapes or pictorial work as it is of portraiture—almost requires the photographer to possess as a background either actual art training or an adequate grasp of the fundamentals of composition. I say "almost" because all of us know exceptionally fine photographic craftsmen who have never studied art and could not for the life of them explain just what it is that makes their pictures good. They are the exceptions that prove the rule because such persons have an instinctive knowledge of composition. It comes naturally to them.

Narrowing the field down to portraiture, we arrive at two more essentials. The first is mastery of the fundamental basic lightings. The second is the ability to vary these lightings so that the resulting photograph may be as "modern" as the sitter desires, while still adhering to their inherent correctness. I can neither agree with nor forgive the photographer who makes basically wrong lightings and then attempts to foist them upon the public by terming them glamorous. Modern lightings, and I concede and appreciate the demand for them, can and should be made by adhering to good photography and composition. For the mere sake of novelty there is no excuse for abandoning good sense and established principles.

For lighting equipment in my studio I have available a Photogenic flood light of eight 30-watt fluorescent tubes, a boom spotlight, a Photogenic Sun-Spot, a Beatrice and two Beatrice Hollywood Hi-Lite spots in which I use daylight blue lamps, three #2 photofloods in ceiling fixtures for general over-all indirect illumination, and a north skylight. In other words I am equipped for any emergency. It is my contention, however, that whether I use daylight fluorescent or incandescent as a source, or even a combination, I can reproduce any lighting. I have been a confirmed addict of fluorescent light since its first appearance on the market. Its soft, cool light is far easier on the sitter's eyes, I find it has greater workability and it seems to bring out more natural expressions.

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A. D. WICHERS, M. PHOTOG.
Topeka, Kansas



Lighting diagram for Mr. Wickers' glamor portrait of a young lady.

DESPITE the comments of many contributors to this book with respect to glamor portraiture—a few of them not overly complimentary—it happens that glamor portraiture is my specialty and, quite naturally, the subject of my demonstration. Now just what is this thing called glamor over which such a photographic controversy has arisen? Webster defines it as "A charm on the eyes, causing them to see things differently than they are in reality." And so I ask you what is essentially wrong about glamorizing "plain Jane" and causing her to look in your resulting portrait as she has always dreamed of appearing? Are we not, as professional photographers, chiefly dealers in happiness? If we have the ability while retaining a likeness to beautify it as well, what is wrong with that?

Much of this argument has arisen because of a basic misconception on the part of many professionals. They think that glamor portraiture requires nothing more than the use of special lights, a different lens, or some out-of-the-ordinary or even awkward position of the sitter. Far from it, my friends! True, the glamor portrait must be something more than the customary straight up-and-down head-and-shoulders, but beyond paying more attention to your posing you must be able to look into your young sitter's heart and bring out that revealing feeling which you think will be most appealing to her friends and parents. A good rule to follow in securing expression is to get the head and eyes in a good position and then watch the mouth. When that is pleasing, the whole expression will be good. Remember that it is the realignment of the muscles of the face which causes expressions to vary. The muscles controlling the mouth and lips are the most mobile and the most capable of change. The other facial muscles follow them. If you doubt this, try to smile with your lips and frown with the rest of your face, or vice versa.

I follow no set rules in making portraits. I let the character and appearance of the sitter influence me and proceed to produce whatever seems to be the most appropriate lighting

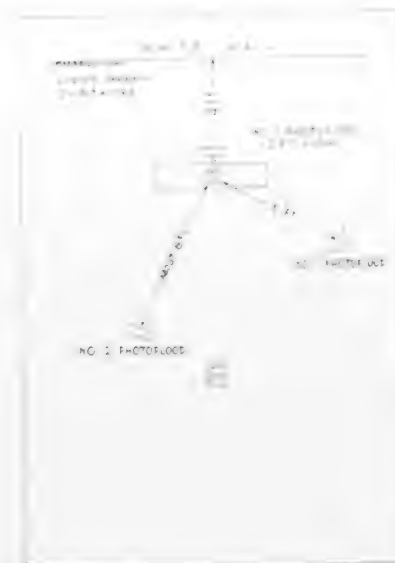
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JORDIS WIKEN

Milwaukee Wisconsin



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Lighting diagram for Miss Wiken's unconventional portrait of a young lady

My methods are far from orthodox. They may shock the more conservative worker yet, on the other hand, may help to convince those with less experience that a heavy investment in lighting equipment is not necessary. The illustration I offer may, from a purely portrait standpoint, warrant a bit of explanation. Although as a matter of course I make of each sitter the usual number of portraits in the customary manner I always include one of these poses, which they term "artistic," and invariably these are the pictures most talked about and the most likely to bring new sitters to my studio. This young lady is not a professional model. She was, when this photograph was taken, a worker in one of our defense plants.

I pay no attention to all the warnings of "You can't do that" or "You must do this." I suppose, being a woman, I must always fix the formula to suit myself; anyway people seem to be satisfied with what I give them. I devote all my attention to composition, to obtaining grace and ease in my subject, so that my portraits shall appear restful.

I have no spotlights, no screens or reflectors, no shades to pull up or down, no backgrounds other than a white sheet nailed to the wall. Everything is done in the simplest possible way. For a dark background I simply move my sitter farther away from the sheet. My camera room is twenty-four feet from wall to wall so that I have ample room. I have one posing bench, which is used for all my subjects. In other words, everything is so planned that I need expend the least possible energy on my equipment and can give the greatest part of my attention to the composition of my portrait.

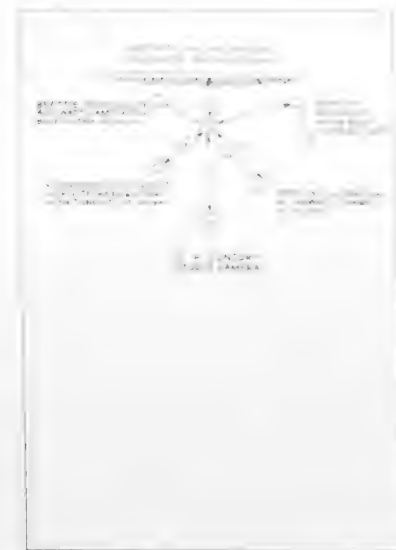
My camera is a 5x7 Watson view, but I use pieces of cardboard inside the holders, at each end, to mask them out and then use a 4x5 film in the remaining space. This works very handily for me and I much prefer a 4x5 area from a compositional standpoint. All of my exposures are just a quick squeeze of the bulb on Eastman Super XX panchromatic film. As for my lights—well! To each of two old music stands I have added a piece of wood extending the height to

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FONVILLE WINANS, M. PHOTOG.

Baton Rouge, Louisiana



Lighting diagram for Mr. Winans' portrait of Alleene Gurlinghouse.

BEFORE one can properly understand a photographer's methods or, to put it more plainly, just why he works the way he does, a bit of his studio background is helpful. So, first of all, with the exception of an 11x14 photograph on an easel near a window there is no outward indication that my place is a studio. I have no sign, not even my name on a window, and I do no advertising, though I do receive credit lines in the newspapers and occasional free publicity. My studio is not too neat, having more of a "workshop" or Bohemian atmosphere, but my sitters seem to like it, make themselves at home and urge me not to change it. And because I work better with a musical accompaniment and it pleases the sitters, I select from a considerable assortment of records those which seem to me appropriate for each individual.

I like a crisp, brilliant negative, a bit on the low gamma side, which means that proper lighting, exposure, and development are crucially important. Admittedly I have difficulty in consistently producing this type of negative although my percentage is reasonably high. It would be better were I completely free of technical worries when working behind the camera, but during the war years, and since, because of the continuing film shortage I have been compelled to use six different varieties in all. This disturbs my mental processes to the point where I never relax completely until I see the finished negatives. Perhaps by the time this book is out I will be able to stick to one film and one developer—I hope so. In the meantime my processing is by time and temperature; I keep records of each batch of film and each tank of solution.

My first demonstration is of Alleene Gurlinghouse, a good-looking young student at Louisiana State University who lost her husband overseas more than a year before this portrait was made. I "discovered" her during a beauty contest in which I was among the judges and was struck with her potentiality as a photographic and fashion model. There is no problem involved in photographing anyone as good-looking as Alleene, and this picture was posed partly to show the hat and partly as a possible salon print. Actually it was later made part of an eight

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FONVILLE WINANS, M. PHOTOG.
Baton Rouge, Louisiana



Lighting diagram for Mr. Winans' portrait of a mother and child

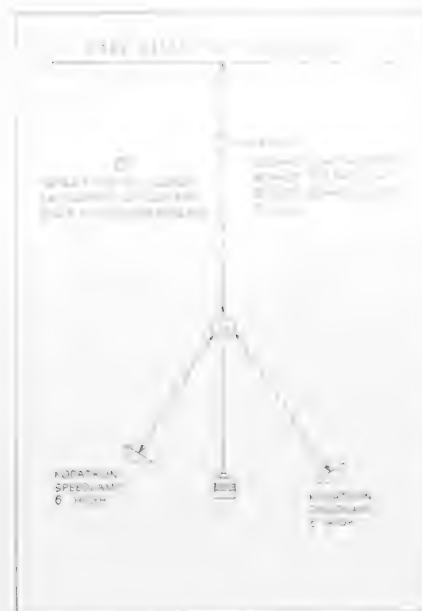
(continued on page 22)

column newspaper layout when our best local department store agreed with me as to her modeling abilities and she took a part-time fashion job. (She has since signed with the Powers Model Agency of New York.) We wanted a large head, but an out-of-the-ordinary pose glamor style, with an outdoor background for the plain sweater. For this I tacked a number of artificial flowers to an ordinary white ground and, as the diagram for this portrait indicates, placed her just close enough to the background so that detail, though out of focus, would be evident.

I used for a main light a #1 photoflood in an ordinary desk-light type of reflector. To this reflector I have attached a "snout," which is nothing more than a five-quart oil can with the ends removed and the interior painted a dead black. The Photogenic Hi-Power fluorescent bank of four 20-watt tubes, four feet high and to the right of the camera, served as a balance light. Note that I kept all the lights low to secure adequate illumination beneath the hat and to bring out the complete value of her eyes with no heavy shadows in the eye-sockets. To retain a general high key throughout the portrait, because I did not wish dark shadows even on the shadow side, I employed a 400-watt lamp with a blue filter in a Beattie Studio Hi-Lite at the left rear, four feet high; and finally, because the hat was dark and to complete the feeling of roundness, I placed a Beattie Boom-Lite with another lamp behind a blue filter at the right rear, this light seven feet up.

This portrait was made with my Number 10A Century Studio camera, on which I have a 4x5 revolving back, and the lens was an F. 3.5 16" Wollensak Varium. This was stopped to F/11 and the exposure was one-fifth second on 4x5 Ansco Triple S panchromatic film, tank developed in DK-60a (one to one) for ten minutes at 68°. The print is on Opal G, developed two minutes in D-52 at 70°.

(continued on page 22)



Lighting diagram for Mr. Woodcock's two portraits of children.

FOR a long time I have found myself in a perpetual state of disagreement with most of what is written and almost all of what is said with respect to lighting. I believe there are unlimited possibilities in photography, but so few of us have done more than scratch the surface that everyone would be better off if the experts did more work and less writing or speaking. Because skylights were a necessity in photography's early days, a sort of glamor has been attached to skylighting effects by the older members of our profession, so that they are prone to consider all other types of lighting wrong. This attempted limitation of an art as plastic and flexible as photography is nothing short of stupidity. I have made a habit for some years of including with my exhibition entries one portrait of a young woman, photographed with spotlights. Without exception these have been rejected, usually with a comment like this from the jury: "Beautiful workmanship but we cannot accept lightings of this type." This smacks of a shortsightedness and intolerance which I consider totally unwarranted. In my opinion and whether the "old guard" like it or not, the truth is that the greatest of our present-day portrait lighting craftsmen are in Hollywood working almost exclusively with spotlights.

With that off my mind, on to my own work and methods. There are three sets of lights in my camera room. For the older and more traditionally-minded sitters I use two fluorescent banks in the customary manner, one fairly high and in line with the lens and the other at approximately a forty-five degree angle from the subject. These are all very well but younger people want more action. For them I switch to two 750-watt Keglites and a Beattie beam. Such a set-up, using diffusers, produces a strong, solid lighting and when the light is strong I can do anything my imagination will permit. My preference is to try these first at orthodox angles and then to throw caution to the winds and attempt something I never even dreamed about. It is just a tonic for jaded ideas, and the sitter just loves it!

For the past four years I have been working exclusively with two Beattie lights. I have

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GILBERT WOODCOCK, M. PHOTOG.

Newton, Iowa



and y... When I come to... the... of the... motion... and... while in the... and... response... the... entertainment... and...

After trying for a couple of years to see these... I discovered a system which gives me better... them one on each side of the camera... heights from the floor will vary to some extent but it happens that my diagram... of the accompanying portraits... except for the 750 watt spot which was not used in the... of the one with the dark background. The result is a perfectly flat light... half normal and then develop twice as long as for normally lighted negative. This method affords the greatest tonal separation in the light areas of the pictures and avoids the heavy shadows in the facial modeling which are so objectionable in the case of a child.

Both these portraits were made with a 20" Wollensak Vitax lens on a Number 8 11x14 Century camera. The lens has a built-in diffuser, but I always use it sharp. The exposure, which is, of course, automatically determined by the speed of the flash, is 1/30,000th second with the lens stopped to F 16. The two Kodatrons are synchronized with a Packard shutter which operates at pin-shutter speed. The film used was Ansco Triple S panchromatic, tank-developed for twelve minutes in DK-60a at 68°, with uniform agitation every thirty seconds. The two prints are on single-weight Kodabromide F-2, developed about one minute in D-72.

KAY YAMADA, M. PHOTOG.

Dallas, Texas



Lighting diagram for Mr. Yamada's home portrait of a lady.

I HAVE selected this simple portrait rather than something more unusual or striking because I feel that this is the type of work we are most often called upon to produce. Furthermore, I believe it is important that the student of portraiture learn certain basic lightings so they may be thoroughly fixed in his mind at all times. Each such lighting can then be used as a foundation for more complicated arrangements. No matter how many lights we use, if we start out with a basic lighting and then add other lights, each for a definite purpose, we will find ourselves with a completely organized lighting instead of a meaningless jumble of light that from every angle.

The starting point of this portrait was a plain profile lighting, produced by one broad main source light, the #4 photoflood shown in the diagram. At first this was placed closer to the sitter than the diagram indicates. Finding that the shadows were too heavy, a fill-in light was called for; in this case a #1 photoflood with the reflector turned well away from the subject so that this light is entirely indirect. The effect was improved but it remained a very ordinary photograph. To add interest and zest the spotlight was introduced, three feet from the subject and sufficiently high for the light to strike the slightly upturned face at a forty-five degree angle. At this point the main source light was pulled away from the subject to balance the spot at a distance of about eight feet. For an interesting variation this main source light may be greatly subdued, thus creating a modified line profile lighting. I might add that all the lights are day light blue, that the main source is a sixteen-inch reflector with tracing cloth diffuser and that the lamp in the spotlight is a #2 photoflood.

The background was a wide window shade, painted matte black. The slight relief in the ground was introduced later by means of crayon sauce on ground celluloid, placed behind the negative in the enlarger. To avoid the danger of a background so "busy" that it will detract from the subject, the user of this method should take care to leave a little space between the

continued on page

by ROSENFELD MARABLE DE TAMBRE, M. Photo., Gainesville, Florida

face and head, only the plainest of arrangements was used, keeping the pose, lighting, and background simple yet direct. My husband without make-up is slight of body, but he possesses a strong face. Therefore the pose had to be planned to add force and strength, hence the clenched fist which draws attention to the head and minimizes the rather narrow shoulders. The background, blue-gray in tone, was selected to give contrast to the head and to harmonize with the body.

In a demonstration of this sort the modeling of the face is of utmost importance. It is necessary to convey the impression of great strength and determination of a man full of vigor and purpose. For this reason a single source of illumination was used, a single arc lamp, providing both general lighting and the needed brilliance. The arc was placed about five feet from the model. It is suspended on a movable metal stand, about ten feet from the head and is diffused with taping cloth.

A head screen was needed to control the light on the right ear and the head. The background was about six feet behind the model, giving a sense of depth and distance to the picture. The camera, equipped with a 16" F. 4.5 Voigtlander lens, was directly in front of the model, slightly above eye level. The exposure was two seconds at F. 8.

by JAY W. B. EDMUNSTON, Hon. M. Photo., Washington, D.C.

for more detail in the clothing than would be afforded without its use. The head screen is a standard 12x16 affair on a goose-neck attached to a standard and is there to prevent the main light from illuminating the ear more than the face. The distances indicated are not necessarily quite accurate as I have fixed them in from memory, not thinking at the time that I would ever need definite data.

For this portrait I used a 17 1/2" Voigtlander Heliar lens at F. 4.5, making a one second exposure on 8x10 Defender XF panchromatic film, and this was also tank-developed by time and temperature for eight minutes in A.B.C. Pyro. The reproduction is from a contact print on Professional Azo F.1, while the delivered prints were on Professional Azo G-1.

by the late JOHN A. ERICKSON, Hon. M. Photo., Erie, Pennsylvania.

it and the light is equipped with an iris diaphragm and rheostat—what I call a "dimmer." The diaphragm permits an increase or decrease in the amount of light played upon the face to illuminate the side planes of the nose and temple.

The dimmer, nevertheless, plays the leading part in the use of the spot itself. Since the spot is the most important keynote in highlighting a portrait, photographers should study out the reason for this light much more seriously than most of them do. I have seen the use of spots attempted and abused merely because the photographer did not have full knowledge of the spotlight's attachments or a proper appreciation of their purpose and complete application. Because the spot acts as the basic principle in the scheme of all high-key lighting, a picture can be made or spoiled at this point if the spot is not handled correctly.

I did not myself learn of its possibilities at once. My researches into its use lasted through many years of practice. In all my trial tests I strove mainly to overcome the burning up of my highlights without employing diffusers and screens. To me diffused light is "mushy" and lacks the "kick" and brilliance of a clear light thrown directly on the features. Yet at last I concluded that the secret of properly applying the spot was centered in the dimmer and I found that this did, ultimately, solve all my problems. So now I use the spot raw but, by using the dimmer, reduce the density of the light concentrated on the subject.

For balance with lighting of this type, a reflector is essential. Mine is a Photogenic Hi-Power Silflite and for this portrait it was placed two feet from the subject, three feet high, turned to reflect the light from the circular fluorescent lamp. Like most photographers I have a battery of lenses, but my pet has long been a 16" Wollensak Beach Multi-Focal which I used in this

case. I used a 16" F. 4.5 lens, and the exposure was two seconds at F. 8. The background was a plain, light blue, and the subject was dressed in a light blue suit.

For many years, and until the time of his death, I ranked my good friend John B. Edmundston as the leading portrait photographer in the United States. I felt greatly complimented when he consented to contribute to this first of my Lighting Demonstration Issues, the more so because he rarely demonstrated in public and seldom, if ever, wrote about his methods. The quality of his photographs had to be seen to be believed and he often spent hours over one print in order to produce a portrait that would be in his opinion, worthy of exhibition. Though he is no longer with us I believe this book would be incomplete without the description, largely as he originally wrote it, for the benefit of the newer generation of photographers. I might add that the diagram also, is his own. CHARLES ABEL.)

After my work at the retouching stand is completed everything is smoothed in a vacuum print-making has always been the least of my worries. The photograph from which the reproduction was made was projected on 11x14 Kodakure R with an exposure of seventeen seconds. The time of development was one minute forty-five seconds in D-52 and it was finished by final toning to a chocolate brown in the Nelson gold bath.

(For many years, and until the time of his death, I ranked my good friend John B. Edmundston as the leading portrait photographer in the United States. I felt greatly complimented when he consented to contribute to this first of my Lighting Demonstration Issues, the more so because he rarely demonstrated in public and seldom, if ever, wrote about his methods. The quality of his photographs had to be seen to be believed and he often spent hours over one print in order to produce a portrait that would be in his opinion, worthy of exhibition. Though he is no longer with us I believe this book would be incomplete without the description, largely as he originally wrote it, for the benefit of the newer generation of photographers. I might add that the diagram also, is his own. CHARLES ABEL.)

by FERENZ FEDOR, M. Photo., Greenwich, Connecticut.

second at F. 11, one stop greater should be F. 8, one less, F. 16. You will use nine films and it is assumed you will keep proper records of each.

STEP TWO. Turn your subject forty-five degrees and move your camera to face the subject. The lighting will now be on one side of the face. Take a new meter reading and shoot three exposures at that reading, plus a fourth when you hold up the reflector (a two foot by three foot white cardboard will be sufficient) to lighten the shadow side of the face. Take three more, plus one with the reflector, at a stop greater than the meter reading and then repeat the performance with one stop less, so that you use twelve films in all.

STEP THREE. Turn your subject so that the sun is directly behind your victim. Shoot twelve more films, repeating the same procedure as in Step Two. It ends here, so don't worry about the film you are using. Certainly you have wasted much more on other problems. If any of this has not been entirely clear the diagrams will make it so. I am sure.

Now process your exposed films in any standard developer, preferably that recommended by the manufacturer of the film, but do so in the following manner. Develop for the normal time one film from each step at each stop, plus those taken with the reflector. That will be three from Step One, four from Step Two, and four from Step Three. Now take another set of films, one from each step at each stop, and develop them soft, 20 per cent less than normal. There will be nine in this set (three from each step) because you have already developed the extra set made with the reflector. Finally, take the remaining nine films and develop those 25 per cent longer than normal. When your films are dry, print each on normal Number Two paper and study the different effects and quality of the prints. With slight variations, any range of print or negative quality should be at your command assuming that you faithfully followed the instructions. The purpose of all this was not only to learn something about control in development but to see what happens when a harsh—contrasty—lighting is used. From the above group of neg-

atives it should be possible to make a high key print (if the subject is appropriate), texture print, low key print, full range print, or whatever.

That accomplished, let us turn our attention to indoor, or artificial lighting. We will now need our camera and tripod or stand, reflector, film, meter and model—plus a couple of photofloods or similar raw lights and a white background or wall. With artificial lighting, theoretically at least, our problem should be simplified because of greater control in placing our lights at will. We purposely emphasized our three steps in the use of daylight in order to show the similarity inherent in the use of artificial light.

STEP FOUR. First think of the sun being over your shoulder in the late afternoon. In Step One, place your subject on a stool five feet in front of your white background wall. Place your camera about five feet from the subject with the lens about level with the subject's eyes. Place one photoflood, in a reflector, beside the camera and at the same height. Let us call this our "basic" light. Take the meter reading and make one exposure at the meter reading time at one stop greater and one at one stop less. Develop all three the normal time and make a test print from each negative on the paper of your choice—remembering that these test exposures will be used as a key.

STEP FIVE. This is going to be different from our outdoor exercise because camera, subject and basic light all remain as they were. However, we are going to place a second light, similar to the one we have by the camera, forty-five degrees to the left of the camera and five feet from the subject. If our lighting has been correct, the addition of this second light will have little effect. Take your reading and make the exposure. Now move this second light 10 per cent closer to the subject, reduce the exposure 10 per cent and make another exposure. Take another exposure with the light 20 per cent closer and still another at 30 per cent, reducing the exposure the same amount each time. Develop these negatives the normal time. This lighting is the one I prefer. A variation is to keep the second light stationary and move the basic light—the one near the camera—backward and away from the subject the same percentages while keeping the exposure constant.

STEP SIX. Now to try some back-lighting, which is necessary only for special effects in portraiture or lighting up the hair. In this exercise turn your subject so that the side of the head faces the camera, for a profile. Keep your back light out of range of the camera. Start with that light at a five-foot distance and move it closer, as before, 10 per cent, 20 per cent and 30 per cent, reducing each exposure accordingly. As in the case of the three steps with daylight, I have offered you a second set of simple diagrams.

When you have completed these second three steps, you should have negatives of various contrast. Don't attempt to judge them, but make a set of prints and spend some time determining which are best in quality. Then make any variations in the light you wish, using the same technique. It is now possible to start with your basic light and add as many more as you need. For individual portraits you may want to add a spot, for large groups or special settings perhaps a few more; but keep in mind your basic light and place each additional light one at a time by this percentage system.

Practice with this will make it become automatic and then it may be duplicated with any type of light or equipment. Especially when using flash, where you cannot judge the result visually in advance, the system cannot fail. It is possible to use as many lights as you wish but keep them at a minimum for the effect desired.

One last thought. It is impossible to tell you how to light each individual subject, because all of your sitters will be problems in themselves. Whether they have long or short noses, whether they are thin or stout—whatever other characteristics they may have—may be corrected or disguised, or at least minimized, by placement of the camera or proper use of light and shadow. First, though, you must learn to control contrast, to keep your lighting simple, and to experiment with each new problem. Do this and you'll be surprised how each successive difficulty is eliminated.

By LEO FISHER, New York, New York

my own ideas and also tried out the system on a number of subjects. I have found the value of simplicity. Today my equipment—light, background, camera, reflector and meter—is reduced to a minimum in the sense that it is all that is necessary to make a good photograph. I have only three backgrounds—white, black and gray. The white ones are on a movable frame around a 4-foot square to give me a square, rectangular, rounded flat white on each side. I can use any of a large number of colors, and I can use different backgrounds in each and the same way. I can use any of a large number of colors. My main source lighting is a Photoflood lamp, in which I use as needed two 100-watt lamps in metal reflectors and two 100-watt spots.

In this portrait I used the harbor arc seven feet high and four feet from the subject with one of the 500-watt lamps directly above the camera throwing the light directly on the young lady's face. The white background was illuminated with a 19-ampere, 400-watt M. camera is an 8x10 Century on a Master Studio stand and the lens is a 12.5" Helios with a Packard shutter. The exposure was a half second at F 8 on 8x10 Eastman Super XX panchromatic film. The negative was tank-developed for nine minutes in DK-60 at 65. The print is on Inductane Royal White, developed for two minutes in D-50 at 65.

By GLEN FISHBACK, Sacramento, California

much of the problem I still had to call on my retoucher for some final corrective work, but the young lady was vastly pleased and so was the publication's editor.

With respect to the lighting diagram, though I can conceive of no better way of teaching lighting or explaining a photographer's methods when personal instruction from him is out of the question, I think there is one major weakness to this approach which has never been emphasized sufficiently. What I mean to convey is that no lighting diagram can be final and the student must not expect to duplicate any lighting even by the most religious adherence to a diagram. Too many factors, both human and mechanical, are involved. In other words it is impossible to set up lights in any given manner in the anticipation that everyone photographed under that arrangement will look as well as the subject for whom it was originally created.

Though the study of the many diagrams in this book cannot fail to be helpful in fostering an appreciation and understanding of lighting fundamentals, as soon as that knowledge has been gained I believe the would-be portraitist should put the book away. Having studied it thoroughly he should know the reasons for and the functions of his main source light, his balance, reflector, or modeling light, and the results to be hoped for by the addition of supplementary spot or other lights on the subject or the background. So equipped mentally he should select a subject and start from scratch by placing his main source where it will do the most good for that subject and then, as needed, add other lights until he has produced the expression, characterization, lighting—or call it what you will—which he has in mind. I feel that portraiture is about 95 per cent the ability of the cameraman to interpret what he sees in terms of his potential finished photograph. To put it plainly, too few photographers learn to see and think for themselves and too many are seeking to memorize some rule which will do their work for them.

By MAYME GERHARD, Saint Louis, Missouri

exposure with a Packard shutter on 5x7 Eastman Super Panchro Press Type B film, tank-developed in DK-50 diluted one to one for nine minutes at 68. The print is on Opa G.

In conclusion may I suggest to those who really wish to improve their portraiture that they study the work of such Old Masters as Rembrandt, Raphael, Greuse, Franz Hals, Hogarth, Whistler, Romney, not to mention some of the more modern artists. All of them worked for balanced spacing, proper lighting, naturalness of pose and expression. Follow them and you can't go wrong. After all, your portrait must first be in your mind if your finished print is to convey the impression you desire. The painter is more fortunate; he can simply paint what he sees, the background, surroundings, or even the figure which to him are undesirable. The photographer

shutter on 8x10 Eastman Ortho X film which was developed in Metol-Borax fine-grain developer at 65. The print is an 11x14 projection on Opal G Portrait Enlarging paper.

By WILLIAM A. KALL, Vancouver, British Columbia

For work with children I would not consider anything other than a 3½x4½ or larger Graflex (my own choice being the 4x5) hung from a strap around the neck or used on a stand which will hold the lens at or to the child's eye level or just slightly higher. I find I can look into the hood of a Graflex without contortions, best when the ground-glass is about thirty to forty inches from the floor. This means a posing bench (I use a box) height of about twenty inches. Personally I prefer to use cut film in a Graflex changing magazine and an emulsion of sufficiently high speed to permit fast exposures with some stopping down. In this case the camera is an F 5.6 11" Cooke Telephoto. The exposure was one-fiftieth second at a stop between f/8 and f/11 on Eastman Super Panchro Press Type B film, tank-developed in DK-50 by immersion temperature.

So much for the technical details. When the child enters my camera room there is only one place to sit and right there is a large toy with all the lights playing on it. Nine out of ten children make a bee-line for the toy and are up on the box before they know what hit them, which expression is more than a colloquialism in this case because frequently they receive a little gentle help from me at the seat of the pants. Then I leave my lights alone, instead I talk to the child continuously. Children demand attention and without it become bored very quickly.

Sidling up to the camera I focus and in less time than it takes to write about it have made one exposure which usually is a straight record shot. Then a noise, anything from a cat's miaow or a foghorn's toot which I can produce, causes the child to look up, either inquisitively or puzzled. This can be varied or repeated according to the reaction and three or four exposures result. Some youngsters laugh riotously when they find out who makes such silly noises, others make them right back at me. In either event I have several more exposures. Then I break out a new toy and make the child catch it. After one or two tries the child laughs happily with each successful catch and in quick order I have a full dozen.

When children start to cry for any reason I merely ignore them. This usually makes them cry all the more—more exposures for me, of course—or sometimes I cry myself. In some cases this makes them furious while others smile through their tears. All the time my shutter is working. This may sound very callous and some mothers think I am a fiend, until they see the results. Then, since after all the whole procedure lasts only five or ten minutes, all is forgotten.

By JOHN KENNEDY, Hon. M. Photog., Toronto, Ontario.

Portrait lens stopped to approximately F 4.5. Exposure was one-half second with a Thornton-Pickard shutter on 4½x6½ orthochromatic film, tank-developed at 65° for about eight minutes. Nearly all of our prints are projections. We changed to the smaller size film by necessity during World War II and have seen no reason to return to 8x10.

By MAURICE CARNES LACLAIRE, Grand Rapids, Michigan.

period of years turned more and more to the miniature camera for portraiture in both black-and-white and color. I use a 35mm Contax with an 85mm Sonnar lens, on a light though thoroughly solid tripod. A steel clamp of my own devising grips the camera rigidly to the tripod head. This is essential because the slightest movement of a miniature camera is fatal. The attachment works so well that I frequently lean on the camera while talking to my subject and making my exposure, all without fear that the camera will move.

My two #4 photofloods, placed as shown in the diagram, produce a simple broad lighting, the kind most professionals prefer for portraiture. This type of lighting leaves no "fussy" over-lighted areas to distract unnecessarily from the features. The strongest light is on the face and eyes, where it should be in order to hold the attention. As I remarked before, I consider the spacing of the portrait within the picture area very important. To give a feeling of dignity there

most be a sense of proportion. The head of the subject should be about one-third of the total height of the picture. The shoulders should be about one-half of the total height. The feet should be about one-third of the total height. The background should be a simple, uncluttered surface.

For the portrait, the lighting is the most important factor. I use two photofloods, one on each side of the subject, and a third one above the subject. The lighting should be soft and even, with no harsh shadows. The background should be a simple, uncluttered surface.

The portrait should be a study of expression. The subject should be in a position which eliminates the necessity of talking down or crouching and also makes it much easier to keep the subject's eyes on the proper level. Behind the platform and some distance from the background, which is white, I have a large

platform and some distance from the background, which is white, I have a large

going to be able to keep him still? Well, the boy was a very cooperative fellow and he kept the picture of his dog. Sure, he'd hold him! Call it child psychology if you want, or just plain common sense. It's the sort of thing one has to use every day in obtaining portraits that actually

Creating fine portraits of artistic and technical quality is very desirable. It is quite a thrill, and it is even more thrilling when one receives recognition for the effort. That is not too difficult for those who have artistic leanings and can master the mechanics, but the stumbling block to success in portraiture is the human element. There are many types of people, and variations of each type. The real thrill—and incidentally, success—comes of making satisfactory portraits of those sitters whom we regard as impossible, even if in some cases our concentration on the task of achieving a natural expression prohibits us from paying sufficient attention to the artistic or technical. I well remember a remark made by the late Charles Aylett, Hon. M. Photog., a past president of The Photographers' Association of America, and one of this continent's finest portraitists: "I am coming more and more to the belief that good portraiture is at least 70 per cent psychology." I am sure many agree with him. If you are interested in this important angle of portraiture—and who isn't?—perhaps a few ideas in which I have come to believe implicitly will start you off on the right foot in a study of expression.

1. Conscious control of expression is difficult, almost impossible in the majority of cases, and even when obtainable is contingent upon poise, assurance, confidence, and a feeling of being completely at ease.
2. Good expression depends on natural reactions.
3. Natural expression is involuntary, an unconscious reflection of one's state of mind, moods, feelings, thoughts, and emotions.
4. When we are natural, we are not conscious of self or of expression.
5. Giving directions with respect to expression in most cases aggravates self-consciousness.

I am not a psychologist but I have observed that the state of mind of most people who visit a studio to have a portrait made is anything but easy. They feel that results are dependent on their ability to put on a good act, but in most cases their confidence is zero. It is easy for the photographer to alibi by saying that a sitter is impossible, but that is an admission of his own inability. People place their confidence in us. They want to be natural, and to look natural. It could be that our approach, our attitude, our personality, our methods, perhaps the appearance of the studio, or some remark by the receptionist, has caused an unfavorable reaction. They are licked before an exposure is made. Our task is to restore their confidence and to create the desired reaction. The method chosen is immaterial. It is an interesting study. Good luck, and remember that there is no standard formula. Human beings are all different.

With that off my chest, let's speak about the portrait. I make all my pictures with the subject on a platform five feet deep, sixteen feet wide and nine inches high. That height brings the subject, when seated, to a position which eliminates the necessity on my part of talking down or crouching and also makes it much easier to keep the subject's eyes on the proper level. Behind the platform and some distance from the background, which is white, I have a large

sheet of ground glass. This permits a range of tones of any gradation from white to black through indirect lighting on the white ground behind the glass.

My main source light consists of two #2 photofloods in ceiling fixtures which are similar to Johnson's Overhead Indirect Flood Ventlites. This light is nine feet from the floor and twelve feet from the sitter. For a modeling light I use a 500-watt daylight blue lamp, raw, in a Victor reflector. I prefer to work with a minimum amount of light. It is less disturbing to sitters, particularly those whose eyes are sensitive to strong light. Fewer lights mean less equipment, which is also less disturbing. The lens, an F/4.5 3A Dallmeyer, was used wide open and the exposure was Packard shutter snapshot speed on Eastman Super XX panchromatic film. All of my portraits, except those of large groups, are made at this speed. It allows me to catch those fleeting expressions which, as I have already explained, are so important—especially when photographing children.

By VIRGINIA LEBERMAN, M.Photos., Austin, Texas.

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placed a muslin screen as a reflector, to lift out the shadow on the cheek and neck. A Beattie Boom-Lite, with a blue filter, at the back on the left side brought out his gray hair. Lastly, behind him, a #1 photoflood in a reflector, also covered with a blue filter and directed against the background, added accent to the face. This left the edges of the picture space to print slightly dark. It was necessary to dodge in the hands and hat.

My camera is an 8x10 Century Studio and the portrait was made with a 15" Voigtlander lens stopped to F/8 on 5x7 Eastman Super SS panchromatic film. The exposure was a slow snap with a Packard shutter.

By JEANNE LINDQUIST, M.Photos., Decatur, Illinois.

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sure was made with a Betax shutter on 5x7 Eastman Portrait panchromatic film, which was developed for seven minutes in DK-60a at 68°. The reproduction is from a 14x17 projection on Opal G, exposed for eighteen seconds in a horizontal 5x7 Eastman enlarger with condensers. The enlarger lens is an F/4.5 Graf Variable and was stopped to F/11. The print was developed for two minutes in D-52 at 68°.

By JANE BALLARD LUNDE, Chicago, Illinois.

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D-76 for 13 minutes at 69°. The print is a projection made on an Eastman Precision enlarger, Assembly B, with an F/4.5 Wollensak lens. It is on Illustrators Special, exposed for twenty seconds through one thickness of mesh for slight diffusion, and developed in D-72 for five minutes at 66°.

By WILLARD C. MARTIN, M.Photos., Terre Haute, Indiana.

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accompanying photograph is the result of my aim. I have tried to compose and light it with sufficient dramatic effectiveness to put it over.

The lighting arrangement shown in the diagram is self-evident. Note particularly the use of the wings on the two Sun Ray lamps. These are important in properly controlling the light. The background is a bit different from some and may be of interest. It is six feet wide and eight feet high, made of insulating board, framed for strength and mounted on casters. A 9A Century Studio camera was used at a height of five feet, with an 11 3/8" F/4.5 Voigtlander Heliar lens stopped to F/8. This was an instantaneous Packard shutter exposure on 5x7 Tri-X panchromatic film, developed for eight minutes in DK-60a at 70°. The print is an 8x10 projection on Kodabromide F-2.

By LOUIS NEUNHOFER, Columbus, Ohio.

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portrait camera with an Eastman home portrait tripod. For the camera I have two sliding backs,

one for two exposures on a 5x7 film and one for four, both of which were extremely helpful during the World War II film shortage and which I still do not hesitate to use on occasion. I have many other lights, among them a fluorescent set-up, which I like, but that is too heavy to carry and the others have been discarded one after the other in favor of the three mentioned.

I have become so accustomed to working with these that they seem almost a part of me and I think of them not as equipment but as instruments with which I produce a melody in light. My own preference is for plain, simple lightings though with this combination I can obtain any desired effect whether it be soft and round, high in key or dramatic and glamorous. I learned long ago that it is best to learn thoroughly what a certain outfit will do and then to stick with it. This refers not only to the lights and camera, but the lens, film, and even the developer. Thus, one is never in doubt concerning the results to be expected. It should hardly be necessary to add that equipment should always be in perfect condition.

The diagram for this portrait needs little elaboration. The lens was an 8 1/2" F/4.5 Voigtlander Heliar stopped to F/6.5 and, as this was taken at a time when I was short of film, the picture is one of four on a 5x7 Eastman Ortho X. For portraiture of children I prefer orthochromatic to panchromatic emulsions. The exposure was instantaneous with a Packard pin-type shutter.

After many years I still prefer the Elon-Pyro A.B.C. developer (D-7) and this negative was tank-developed for fifteen to twenty minutes. The reproduction is from a projection to 8x10, developed in two-solution D-64 which I have also used for years as it gives me three developers in one. All of my finished photographs are made by projection with a 5x7 Elwood Special enlarger and an F/4.5 Eastman projection lens. I expose my prints so they will develop fully in two minutes. I liked this portrait so well that I made a paper negative and then, to add still more to its old-fashioned effect, printed it through a texture screen.

By HOUSTIN PAYNE, M.Photos., Shawnee, Oklahoma.

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this "feathering" the light—to produce a softer effect with more diffusion. This provides the desired roundness with proper projection of the facial planes; it also gives good tones to the flesh. To give the hair life and lustre I added the two spotlights shown in the diagram, both being Beattie Super Hi-Lites with 500-watt T-20 lamps diffused with spun glass screens. One was on a boom and the other on an ordinary stand.

This was taken with my Number 10A 8x10 Century Studio camera with 5x7 reducing back, fitted with a 15" F/4.5 Series II Taylor-Hobson Cooke Portrait Antistigmatic lens in an Ilexpo shutter. The exposure was instantaneous at F/9 on 5x7 Eastman Triple X panchromatic film, tank-developed by time and temperature for ten minutes at 68° in DK-60a. The print is on Kodabromide F-1, developed in Selectol.

By F. J. PECHMAN, M.Photos., Kaukauna, Wisconsin.

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ence between an ordinary and a good portrait. Without this additional care the identical pose and lighting would not have been nearly as effective. Because of it the portrait received several awards.

As the lighting diagram indicates, I use my lights rather close in, the reason being that my camera room is quite small—only sixteen by eighteen feet. The background I use for all my portraits is a white bedsheet stretched over a frame. I vary the tone as desired with a #2 photoflood in a Photogenic reflector, controlling its strength with a rheostat. My camera is an 8x10 Century and the lens is an old Darlot which I estimate at about 16" focal length. It has no markings or stop adjustments and I always use it wide open. The exposure was instantaneous with an Ilex shutter on 5x7 Ansco Superpan Portrait film developed in D-47 for eight minutes at 68°. The print is on Opal G, developed one and a half minutes in Selectol.

By WILLIAM LEONARD PETTY, Columbus, Ohio.

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watch. We do not keep the children waiting in the reception room; they are taken directly to the camera room to be dressed and "prettied up" even while another sitting is being made.

When the appointment is booked, usually over the telephone, we suggest what is best for the child to wear, advising against prints and dark clothes, and we do ask that the child not be told that a picture is to be taken. I make from six to twelve negatives of every subject and never keep a child before the camera more than ten minutes; it is more likely to be only five. Our sittings are booked only fifteen minutes apart. Often I have a mother look through the camera to see how beautiful her child appears under the lights, thus building up anticipation. All of this is nothing more nor less than applied psychology and a customary result as mothers leave the studio is the remark: "My, isn't he wonderful with children."

Although I have supplied a lighting diagram, I want to emphasize that placement of lights and camera, even for another child identically posed against a similar ground and of approximately the same age and size, must vary depending on the eyes, complexion, color, and clothes of the subject. The camera, synchronizer, and light booster are all of my own make and design. One reason why I make so many exposures so rapidly is that a feature of the camera is an automatic changing back which enables me to take six exposures on an 8x10 film as rapidly as I snap the shutter. I might add that while I am always glad to show the camera, I am not a manufacturer and have no duplicates of it for sale. The lens is a 12" Goerz and the exposure for this photograph was one-fiftieth second at F 5.5 on Eastman Ortho X film, developed in D-76. The print is on Opal, developed in D-52. All of my processing is done strictly in accordance with manufacturers' instructions regarding formulae, time, and temperature.

By JOHN E. PLATZ, M.Photo., Milwaukee, Wisconsin.

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About four feet above the bride's head and three feet behind her, at full spot, a 500-watt Beattie Boom-Lite lights the veil and train and throws shadows forward to simulate sunlight from the window effect produced by the drape and the leaves projected on the background. These latter are produced by a 200-watt Photogenic Baby Boom-Lite before which is a stand with leaves or large blossoms attached, so placed that the Boom-Lite, as it illuminates the ground, also casts these light gray shadows. By having these leaves or flowers—whatever I am using for the purpose—attached to a stand or tripod, I find them easy to move and adjust to my taste in obtaining the pattern I desire. I prefer this to using slides which result in standardized background patterns that my subjects soon learn to recognize. The quantity of light on the background is important in keeping the ground subdued and in proper balance with the subject.

All of this can be, and is, done in much less time than it takes to write about it. The composition and lighting completed, it is my custom to make from four to six exposures, changing only the positions of the head, hands, and bouquet and having the subject alter her expression. By moving carefully, the bride can turn her shoulders a bit more to the camera and look over her shoulder without disturbing the draping of the gown. Then I pull back the hand nearer the camera, touching the cushion below the veil at the edge of the train, and get a different pose.

The background is a plain wall, painted light gray, and the drapes are rayon satin in an aqua blue. My camera is an 8x10 Studio with a 5x7 back and this picture was made with a 10" lens, about four feet from the floor, stopped to F/8. The film was Eastman Super XX panchromatic, exposure being instantaneous with a number 3½" Packard pin-type shutter, and development was in DK-60a at 65°.

By LEE F. REDMAN, M.Photo., Detroit, Michigan.

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can feel confidence because they have an immediate interest to engage their attention and they are not so disturbed by the activities of the photographer. For such pictures, it is well to arrange a side pose of the dog because a front view projects his head too far in front of that of the child. This immediately necessitates stopping down the lens and increasing the exposure, whereas fast shutter speed is required for such active subjects if movement is to be avoided.

For this portrait I used a 14" Goerz Celor lens stopped to U.S. 8 and the exposure was instantaneous with an Ilexpo shutter. The material was Eastman Sports type film.

By EDWIN D. RENTSCHLER, M.Photo., Ann Arbor, Michigan.

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SS orthochromatic film, tank-developed in Elon-Pyro at 69°. The projection is on Opal G, developed in D-52 for one and a half minutes at 70°, the delivered print being gold-toned in a Nelson bath.

By WINIFRED SPAHR RITSCHER, Pittsburgh, Pennsylvania.

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necessary in the making of a good portrait. The public have a meager knowledge, if any, of photographic technique. They are interested, primarily, in perfect likenesses. Personally I consider technique exceedingly important. One should strive constantly toward its perfection but that and obtaining a likeness must be combined. A portrait must be a living, vital thing, to be enjoyed. It is always a pleasure to photograph those who have physical beauty. There is even deeper satisfaction in giving special attention to those not so happily endowed.

The study of light is fascinating. To me photography is a means of painting with light and shadow. In my camera room I have a ceiling light seven feet long which takes the place of the old north skylight of the days when photographic studios were "galleries." Four wall switches control various combinations of the lamps in this light, any of them producing the soft, delicate general illumination especially desirable for portraits of children. I have never forgotten some advice I heard during a convention demonstration: "Don't clutter your camera room with a lot of useless lights." On my return I promptly cleared mine of everything not essential.

The portrait of a child which I have elected to discuss in this book illustrates two problems: platinum blond hair and very large, dark blue eyes. Both of these had to be retained to convey the two most interesting characteristics of this little boy. I used one #4 photoflood in the ceiling light to keep away dark shadows. For a modeling light I have a movable lamp containing two #2 photofloods in a reflector. This was placed near the camera some five feet from the youngster to bring out the features and give light and brilliance to the eyes. For detail in a sitter's hair I ordinarily use a Photogenic Sun-Spot containing a 100-watt lamp but when I want a sunlight effect, as in this portrait, I replace the 100-watt with a #1 photoflood. This kept the face in a subdued light, retaining the beauty of the boy's large, wondering eyes.

This was taken with an Eastman View camera and an 11" F/5.6 Cooke Portrait lens, covering 7x9, used wide open. The exposure was one twenty-fifth second with a Number 2 Packard shutter on a split 5x7 Eastman SS orthochromatic film. The negative was tank-developed in DK-50 for eleven minutes. I vignette about 90 per cent of my portraits of children because I think the delicate effect is appropriate to childhood.

By EVERETT ROSEBOROUGH, Toronto, Ontario.

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a Saltzman boom spot with a 1,000-watt lamp behind a clear condenser, placing it eight feet behind him and somewhat to the right, ten feet high.

An 8x10 Eastman Number 2D view camera with a reducing back was used, with a 12" F/5.5 Goerz Dogmar lens in an Ilex General shutter. The exposure was one-fifth second at F/11 on 5x7 Eastman Super Panchro Press film, tank developed in DK-60a, agitated, for four and one half minutes at 68°. Five negatives were exposed as rapidly as I could shoot them, and this is the best. I talked to the model continuously, driving home to him the way he was supposed to feel and look. We received the order at three-thirty in the afternoon and delivered a page-size print at ten-thirty that evening.

By CHARLES F. SNOW, M.Photo., Boulder, Colorado.

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bringing the balance of light within the brightness range of the film. A reflector can be used for the same purpose. If too much reflector is used, your lighting will be too flat. The same would be true if your fill-in light were brought in too close.

This is the "five-point" lighting described by many of the great artists. It gives projection to the forehead, nose, and chin, and to the two cheekbones, thus giving structure to the face. If done incorrectly, the face is distorted. Gainsborough always emphasized the fact that when correctly lighted a face will yield a good picture from any viewpoint. The use of spotlights to emphasize beautiful hair or some strong feature of a face is quite all right, but this is merely an addition and in no way alters the basic lighting. Keep your effects simple if you hope to make successful salon pictures. A bit of restraint is always in good taste.

By JOHN S. STEELE, Toronto, Ontario.

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ceiling is painted white and is ten feet nine inches high. I use a Weston exposure meter and the readings for this portrait, taken on a manila paper envelope, were: highlight value from Sun Ray spot 6.5, highest value from the 1,500-watt lamp 3.2, shadow value from the "kick" light on the floor .8, general reading from the camera .8. I use a 4x5 Graflex with a Packard shutter mounted before a 25cm F/4.5 Zeiss Tessar. For this exposure I stopped to F/9 and gave the negative from half to one second bulb on 4x5 Eastman Super XX panchromatic film. Development was in DK-50 at 68°, my solution being two parts developer to one of water, kept replenished for complete development in seven minutes. The print is on Illustrators Special, developed in a mixture of D-52 and D-72. In projection the negative was held back slightly on the shadow side of the face while the highlights on the forehead and shoulder were slightly printed-in.

By EVERETT A. STOFFEL, M.Photos., Denver, Colorado.

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heads. The same two fluorescent banks are my basic lights, supplemented with a Photogenic Sun-Spot and a Bardwell & McAlister Keglite when I need additional illumination on the hair or feel a need for especially strong highlights. My camera room is twenty by twenty-eight feet with no windows. The walls are tinted in a light grayish green. An eleven-foot ceiling gives me ample room for manipulating my lights.

By CHARLES F. TOWNSEND, M.Photos., Des Moines, Iowa.

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know by looking at the ground glass, having adjusted the lights and selected the diaphragm, what exposure to give. In this case it was one second and the film was tank-developed in DK-50 for eight minutes at 68°. The print is on Opal G but the head was enlarged somewhat. My enlarger is a home-made affair, an 8x10 camera box with an arc light and a Number 6 Wollensak Verito with iris diaphragm. I formerly used 14" condensers but later discontinued them in favor of an opal glass between the arc and the negatives because I prefer the effect.

By NAN WALLACE, M.Photos., Santa Barbara, California.

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the camera low and had her raise her head. The lens used was an F/3.8 Wollensak Vitax and it was stopped down though I do not recall the exact aperture. The exposure was one twenty-fifth second with a Packard shutter on 5x7 Eastman Ortho X film, developed in DK-60a at 68°. The reproduction is from a glossy print on Defender Velour Black S-2, which was developed in Defender Standard (51-D) developer for one and a quarter minutes at 70°. The print was exposed for three seconds and the lower portion slightly printed-in. The finished portrait was projected to 11x14 on Opal L, exposed for thirty seconds and developed in D-52, with more bromide than the formula requires, for one and a half minutes.

By W. ARCHIBALD WALLACE, Huntington, West Virginia.

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Veltex. For those who wish to try this, let me suggest that a paper negative should be kept somewhat on the soft side. When projecting the positive to make the final paper negative for this print I twisted the negative slightly to make it seem that Mr. Ellis was tipping his chair.

The final print is on Kodalure. One final word about paper negatives. There is only one way to learn. Make a paper negative and then print it!

By J. FRANCIS WESTHOFF, Columbia, Missouri.

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I am a strong believer in varying my backgrounds to conform to the lighting I have selected for any sitter as well as to my sitters themselves and the pose or style for which they have indicated a preference. Consequently I have on hand black and white grounds on which, of course, I can secure any desired tone by manipulating my lights, "broken" backgrounds, two-tone grounds, Venetian blinds, panels of knotty pine and, in addition, special steps and background sets for wedding photographs.

The array of lights and backgrounds I have mentioned does not mean that my camera room is cluttered with equipment. Though ample in size—it is twenty-four by forty-five feet—the backgrounds are kept in alcoves at the far ends while the lights are well out of the way of my sitters.

There are three colleges in our town, and I had some difficulty selecting what might be considered a representative example of my portraiture because we have such a varied range of sitters. After giving careful consideration to many "novelty" lightings more or less essential in a studio like ours I settled on this photograph of a young man from my regular day's work. I thought it would be more helpful to the readers of this book than many others more interesting and certainly more striking. Most of our subjects are boys and girls just like this young chap—all of college age—whose faces have not yet been impressed with as much character as they want displayed in their finished pictures.

All of them, as might be expected, want something "different," yet I try to make certain that each receives a good portrait—good in likeness as well as technique—whether the call be for high key, low key or glamor lighting. Whenever possible I prefer a dark background like this for college students. It makes the young men look masculine while, with soft lighting, it brings out the loveliness of the girls to fullest advantage. And, just among us, it simplifies the retouching problem when the hair has been neglected which is often the case with school appointments.

The front lighting on this portrait came from the eight-tube fluorescent, only six tubes being lit. The reflector sufficiently illuminated the shadow side to keep the dark areas from becoming blocked up. The light on the left side of the face and hair was produced by the Photogenic Sun-Spot in which I used a #2 photoflood lamp, keeping the diaphragm half closed.

My camera is an 11x14 Century Studio. The lens was a Number 3 F/3.8 Wollensak Vitax with a Packard shutter. A bulb exposure of about one-fifth second was given at F/8 on a split 5x7 Eastman Super Panchro Press Type B film, which was tank-developed in DK-60a for five and a half minutes at 68°. The projection is on Kodabromide F, developed in D-72 for about one minute at 68°.

By A. D. WICHERS, M.Photos., Topeka, Kansas.

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Glamor consists of portraying the soul as well as the face and figure. I never ask a sitter to smile. Instead I make some remark that will create one naturally. With younger women, asking if he—meaning friend or husband—is a blond or brunette never fails to produce a smile.

My diagram, which is quite complete, requires little comment. This portrait was made with an 8x10 Century camera fitted with a 5x7 back. The lens, one I use only for glamor and head-and-shoulder portraits, is a diffused focus 18" F/4 Wollensak Verito. The exposure was made with an Ilexpo shutter set on "fast" speed (about one thirty-fifth second) at F/5 on 5x7 Eastman Portrait panchromatic film, developed in DK-60a for four minutes at 68°. And so there you have glamor, which I think has a distinct place in modern portraiture even though some of my very good friends may disagree with me.

By JORDIS WIKEN, Milwaukee, Wisconsin.

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eight feet; there I clamp a reflector containing a photoflood lamp. One is a ten-inch reflector with a #2 photoflood, which is my main source; the second is a smaller reflector with a #1 photoflood. For a backlight or a light on the ground when required, as in the case of my illustration, I have a third reflector with a #1 photoflood. This I clamp on the back of the posing bench or on anything else that is handy and in the right position, or use on the floor. Simplicity is my watchword throughout.

By FONVILLE WINANS, M.Photos., Baton Rouge, Louisiana.

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When photographing children I prefer to work with a Series D Graflex without a tripod. Because I have found that most photographic fluorescent lighting units are unsuitable for use with a focal plane shutter, due to the pronounced stroboscopic effect, I purchased an industrial fluorescent unit of four 48" tubes which reduces this effect to a minimum, and consequently my second illustration and diagram show a quite different set-up, using this unit. Yet, when photographing small babies alone I prefer as a main source a #2 photoflood in a reflector, aiming for much flatter lightings and then developing 50 to 100 per cent longer than normal.

The happy result I secured in this case hardly seemed possible at first because from the time the baby, only two months old, reached my studio door it cried inconsolably. Nothing could be done and a second appointment was made. The mother wanted a picture of the baby alone but again the baby cried and both of us became desperate. At last I found that by playing soft lullaby music and having the mother hold her child closely the crying ceased. We couldn't get the child to smile but that was no longer important and the eventual result made both of us very happy.

The quite simple lighting speaks for itself. On the Graflex I used an F/4.5 $7\frac{1}{2}$ " Kodak anastigmat and gave the negative one-fiftieth second at full exposure. The film was 4x5 Eastman Super Panchro Press Type B, which was tank-developed as in the case of the other, but for thirteen minutes. This print also is on Opal G, developed for two minutes in D-52 at 70°.

By KAY YAMADA, M.Photos., Dallas, Texas.

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negative and the celluloid background, and should also use a rather wide aperture when projecting, further to soften the background effect.

This is a home portrait taken with portable equipment; an identical result can of course be obtained with the more elaborate equipment which one would find in any good studio. The important thing in building up any lighting is not so much what lights are used but the ability to visualize the desired result and a knowledge of how to place the lights to produce that result. Naturally, one must know the relation between the lighting effect produced and the result secured on the film and finally—on the print. It is meaningless to follow a lighting diagram without considering also the type of film and paper used, as well as the developers for each. Each plays its part in the production of the finished photograph and without a thorough understanding of the materials and processing, the diagram tells only half the story.

This was made with a 10" Bausch & Lomb Tessar, stopped to F/5.6. The exposure was one-twentieth second on 4x5 Eastman Super XX panchromatic film, developed in D-1 pyro. The projection is an 8x10 on Vitava Opal, through a texture screen, developed in D-52.

I prefer pyro for negative processing because it produces good printing negatives with fine gradation and long tonal range without building up excessive density. It is generally conceded that for projection thin negatives are preferable to dense ones. The Metol-Hydroquinone type of developer, which produces a blue-black image, lacks printing quality unless developed to a greater gamma than is required by the warm-tone pyro negatives. The use of a texture screen is a matter of personal preference, often guided by the likes or dislikes of the subject. A texture screen should definitely enhance the pictorial quality of a photograph; it is out of place if employed solely as a novelty.